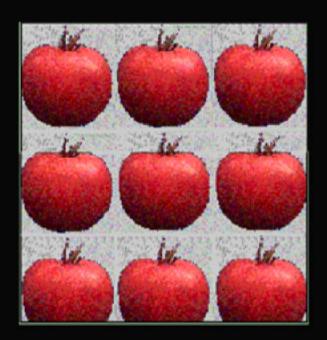
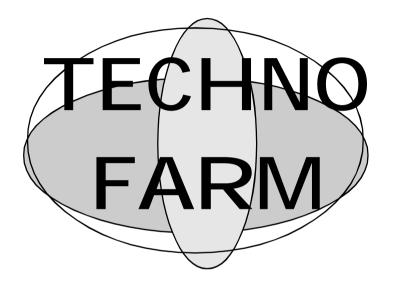
## **TECHNO FARM**

A Cautionary Tale



R. J. RASKIN





## Sneak Preview

**Publication Date** 

Spring 2006

For further information about this title, contact
Black Apollo Press
Germinal Productions
1A Flower Street
Cambridge CB1 2NH

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### \*\*\*Capital News Service\*\*\*\*

#### For Immediate Distribution

# Cross-Party Agreement For Government Backed Genetics Consortium

By Our Parliamentary Correspondent

A GOVERNMENT proposal for a national clearinghouse to help fund costly bio-genetic research through a system of grants and loans has received backing from all major parties.

A spokesman at the Department of Trade and Industry congratulated the opposition for supporting the measure, saying that British science and research, responsible for many of the major discoveries that launched the biotechnical revolution, would now be able to receive the proper financing

so that lucrative ventures could be pursued - especially in the fields of medicine and agronomy.

"The world is rapidly changing," said Jeremy Throckmorton, a newly appointed minister at the DTI. "In the past we lacked the commitment to research and development which has meant losing out in the newly emerging markets. With the passage of this bill, we will be able to compete in the technology sweepstakes which promise a new era of prosperity for Britain."

The bill is due to go before the House at the end of the month and is expected to face little opposition, though several MPs have privately expressed doubt as to whether the proposed legislation contains enough built-in safeguards against untested products from genetic experimention.

# Friday 17 June

"Is this a secure line?"

"Go ahead."

"You heard about the theft?"

"Yes. How bad is it? What's the worst case scenario?"

"I don't know. But you remember what happened in Spain?"

"Yes. Bloody awful crisis. The government fell, didn't it?"

"Still feeling the ramifications over ten years later."

"What does it take for those idiots to learn about proper security?"

"I understood that's one of the things the new bill is about. Getting some funds into their hands for adequate arrangements."

"Right. After the horse has bolted."

"So - how to proceed?"

"Carefully. Don't want to stir anything up if nothing is going to happen. On the other hand, should be prepared for the worst. Have the regional authority keep a weather eye open. But tell them nothing they don't need to know. Handle it with delicacy. Keep everything as vague as possible. Limit your contacts to people you can control. You can always use the 'national interest' line if you need to."

"And if something does happen?"

"You'll have to take it over, directly. I'm afraid you won't get much help from the Agency. Nothing direct. If you need assistance we'll have to contract out."

There was a pause. A brief moment of silence.

"When do you think we'll know if we have anything to worry about?"

"Depends on what they took. But if we make it through the weekend, chances are pretty good we'll come out of it without too many bruises."

### Monday - 20 June

(1)

Pauline Quail was about ready to leave her office when the younger of the two receptionists who worked the late shift approached to ask whether she could see one more patient.

It was always "one more", she thought. Unlike several of her colleagues, however, she might allow herself an inward grumble but she had never refused a last minute patient who was able to scramble in the door before it was shut and bolted. When she was on duty, open hour seemed to go on forever.

Tonight, though, it was somewhat bothersome as she had tickets for a new and eagerly awaited production at the Arts Theatre and she had hoped to slip out after the last prescription had been reluctantly written - another ten days worth of Paxofen tablets to relieve the swelling of an ongoing rheumatic disorder. But when the receptionist explained the circumstances - that the patient was a young child and that the parents were quite concerned - she quickly consented and the medical records were brought to her office so she could flick through them before the child was brought in for examination.

The records, when she received them, proved to be unexceptional. A girl, aged six, born at Rosie Maternity Hospital. Race was marked 'other' rather than 'White British', 'African', or 'Asian', but from the name, Felicity Rojas, she would have known that at least one of her parent's ancestors came from Spain or a former Spanish colony.

In this case she knew that both parents had come from Chile. In fact, she knew much more than that, as she had treated the family - at least the mother, daughter and son for some years now. According to her notes scribbled at the bottom of the file, she had last seen Felicity just a month ago for a minor eye problem. She remembered that it was a time when an epidemic of infectious conjunctivitis was going around and every other child was coming in with puffy, red eyes and tell-tale crusting of the eyelid.

But she also remembered having commented at that time on how well Felicity seemed to be developing. A healthy, happy child, full of vigour and life with an adorable smile and dark, sparkling eyes. She wished all her little patients were doing as well. And she couldn't help but put it down, at least partly, to the tender, loving care of the parents.

It was all the more disconcerting, therefore, when Eduardo and Maria Rojas were escorted into her small office carrying the limp figure of their daughter. Upon seeing the state of the child, Dr Quail dispensed with any thought of pleasantries and had the girl immediately placed on the examining table.

Any general practitioner who has been seeing patients for over twenty years, as she had done, can usually tell at once if someone demands serious attention as soon as they enter the examining room. A person suffering from a bad case of the flu might look dreadful, but a skilled physician sees beneath the obvious appearance, beyond the

pallor, weakness and phlegm, concentrating on breathing, the look of the eyes and curious colourations.

In this case she knew at once that the patient was in distress. The child's breathing was both laboured and guttural. Her face was flushed with fever. But, even more, there were strange lesions on her body which indicated something was happening that went beyond the normal reaction to an ordinary virus or bacteria - at least the kind that was floating around Cambridge at the time.

After listening to her chest and doing a quick check of her vital signs, she did a brief history, garnering a list of observed symptoms and their duration from the mother marking down 'vomiting, headache, muscle pains, diarrhoea' and, beside that, her own observations - 'respiratory insufficiency with dyspnoea and exanthema' (which meant, simply, laboured breathing and skin eruptions).

It took no time to make her decision: looking at the parents who had been sitting quietly on the edge of the straight-back chairs set against the wall, as far from the examining table as space would allow, she said, "I don't think you should get overly concerned. It's probably a mycoplasma - a bacterial infection. But I am a little worried about her lungs so I'd like to send her over to Addenbrooke's for observation..."

"When?" asked Eduardo. Both he and Maria were standing up now. Maria was rubbing her hands, trying as hard as she could to hold back the anxiety that was swelling inside her chest as though Felicity's illness had transferred itself, magically, into her own body. Perhaps she wanted it that way. It was if she needed to share this trauma with her daughter - to feel her pain.

"I'll call an ambulance right away," said Dr Quail.

Fiddling with the turquoise bracelet that fit loosely around her left wrist - a memento from a trip to Guatemala some years back - Dr Quail read her notes over again and then, unconsciously, slid open the centre drawer of her desk and pulled out a pack of cigarettes.

It was rare that she smoked in the office these days since the medical staff had decided jointly that it was important for them to set an example for the younger patients. But occasionally, after hours, she did light up - especially when problems arose that went beyond the routine and needed thinking about.

This evening, as she pondered the events of the day, she found the slight narcotic effect of the nicotine helpful in organising her thoughts. Not that she was especially disorganised - to a large extent her training had been learning how and where to put things into slots.

That part of medicine needed a mind capable of rigorous discipline, for the number of categories were enormous and the process could go on, seemingly, forever. To Dr Quail, this was the least interesting aspect of her profession - and, in the age of computers, a skill that was becoming less essential.

What intrigued her was the other aspect of medicine that took it out of the realm of science and made it into an art. In this realm, one needed skills that depended less on computer aided logic and more on human intuition.

One of her concerns, professionally, was that medical science was becoming, more and more, a branch of statistics. Everything boiled down to probability. Sometimes

the probability factor was so great that it became certainty. Other times it was merely a coin flip.

This is why she smoked. Medically, she knew it was bad. That it could be proven scientifically, she had no doubt. She knew the data. But she also knew, as every physician did, a number of her patients who smoked with impunity - or so it seemed.

To her, a patient like Molly Hargrove was as important as all her cancer victims- a stubbornly independent woman in her eighties, ten children, seventeen grandkids, who worked like an ox and smoked twenty-a-day since she was a kid and whose worst physical problem was a detached retina. Molly Hargrove showed every indication of living well into her nineties.

What Molly proved to her, if it needed proving at all, was that individual people were unique organisms. And what was biologically true for one, might not be true for another. As part of the general population, Molly might have run an enormous risk of developing either emphysema or lung cancer by the age of 80. But, as an individual, she had run a negligible risk of getting either one.

Of course, as a doctor she felt obliged to point out to her younger patients the hazards of tobacco. But, at the same time, she detested the neo-Victorian morality which was running rampant in the health service. And the idea being floated from time to time of refusing to treat patients who disregarded their doctor's orders not to smoke or drink was one she regarded as villainous.

This evening, however, it wasn't smoking or the quandaries of medical ethics that concerned her. She was puzzled by a series of cases she had seen at the surgery beginning early that morning when a man in his late fifties had come in complaining of shortness of breath. There

was nothing particularly unusual about that, of course, except, upon examination, she found a pruritic rash developing down his arms and on his chest. And throughout the day, four other patients had come in complaining of vague flu - like symptoms, all with acute respiratory distress and all with similar skin lesions.

Perhaps if it were February or March she wouldn't have given these patients a second thought. The waiting room would have been filled with influenza victims each exhibiting various symptoms similar to those she had seen today. But it was June, and, for the first time in many weeks, business had been relatively slow.

What concerned her most, however, were the rashes. Skin eruptions are strange things. They can come from a multiplicity of causes and, seemingly, no cause at all. Some people, with particularly sensitive skin seemed to break out in spots if you looked at them funny.

But, to the trained eye, certain kinds of rashes can be an indicator depending on their disposition - blotchy or prickly, their colour - bright red, bluish, or pale yellow, and their placement on the body - torso, face or extremities.

The rash she had noted on the patients she had seen today would have been classified as an NSDR - non-specific dermitological reaction. Ordinarily, she would have shrugged them off as simply a general sign of disease. But there was something about these particular skin eruptions that pricked her curiosity and made her wonder. Firstly, because of their similarity and that similar rashes should be appearing on such a diverse group of people-from a six-year-old girl to a middle-aged man. And secondly, because she had never seen quite that kind of rash, even though it would have been hard for her to say exactly

what it was that made it different - except it seemed to her unusual.

Then, as she continued to peruse the records of the six respiratory-insufficiency patients she had seen that day, it suddenly occurred to her that there was another similarity a very strange one that she hadn't recognised before.

It was then that she reached for the telephone and dialled the number for the Regional Environmental Health Office.

This was quite an exceptional thing for a family practitioner to do. However, prior to going into general medicine, Dr Quail had been in public health. And, because of her background, she was one of several GPs who had been asked to serve as liaison to an epidemiological early warning committee which the European branch of the World Health Organisation had established recently.

Even though the hour was late, her call was forwarded to the residence of the Officer in Charge, Bernie Thompson.

(3)

Bernie Thompson hated getting phone calls at home. Once he had taken off his tie and slipped out of his shoes, it was like sounding the final gun in a football game. He worked like a demon while he was at the office and he caught up on most of his paper work on the train which took him back and forth from his semi-detached in Royston to his office in Cambridge. After that, the way he figured it, his time was his own. Unless, of course, there was an emergency. An emergency that he understood.

What Pauline Quail said to him when he answered her call was not an emergency. Not in his book.

But he knew that as soon as he found out who was at the other end of the phone.

Pauline Quail and Bernie Thompson had crossed swords before. As one of the leading members of Physicians for Environmental Safety she had often been in the position of trying to encourage or badger (depending on one's perspective) the agency to take a stronger line on issues like water and air quality controls.

Bernie Thompson, of course, as a civil servant, was always trying to work his way out of politically delicate conundrums. He did this, like most bureaucrats, by rarely taking a position on anything. In fact, if he had a motto, it would have been something on the order of "The less done, the better".

This is something Pauline Quail understood quite well. And because she understood, she pushed that much harder. More than anyone else he had dealings with, Pauline Quail got up Bernie Thompson's nostrils.

But ringing him at home was one step over the line as far as he was concerned. Especially as the Chinese takeaway which had just been delivered was getting cold.

"You're ringing to tell me of five case of pulmonary insufficiency?" He could hardly believe his ears.

"Six - so far. Five have been serious enough to be hospitalised."

"Why the bloody hell would you ring me at home about six bloody cases of influenza? Why would you even ring me about ten?"

"It's not influenza."

"All right, mycoplasmosis!"

"It's not the season, Bernie. I think we have something environmental..."

"So what the blazes do you want me to do?"

"I want you to ring around the other surgeries first thing in the morning and tell them to keep check on the number of pulmonary insufficiency cases that include the following symptoms..."

"Wait a minute, I'll get a pen," he grumbled.

On his way, he stopped off at the kitchen, opened one of the cardboard containers, sat down and ate his dinner.

### Tuesday - 21 June

(1)

Bernie Thompson rubbed the tip of his puffy nose and muttered something that sounded like "ratsbottom!".

What he had noticed was a spot on his cuff. It appeared to be the remnants of the Chinese take-away meal devoured with bleary-eyed gusto last night. Unfortunately, that was before he had read the report on the very same restaurant on the train that morning which spoke in most unpleasant terms about rodent droppings in the noodles quite likely the same noodles used in the dish he had eaten. Thompson could feel his stomach immediately turn queasy as his taste buds recalled the slightly rancid, oily flavour of the sauce which had caused the spot on his cuff.

It was then, as he directed his gaze to avoid looking at the stain, that he saw the number written on a slip of pink paper blue-tacked to the picture of his former wife which still sat on the far side of his desk possibly as a reminder that things, no matter how bad, could actually be worse.

The number had been given to him in very strange circumstances about a week before by one of his higher-ups in Peterborough who started off by saying, "Write this number down, Thompson."

"What am I supposed to do with it?"

"File it away somewhere. You're supposed to ring it if anything unusual comes across your desk in the next ten days or so. Don't ask me any questions because I don't know anything about it. I was just told to pass it on to you..."

The number he had written down had a London dialling code. "Who am I supposed to be speaking with if I call?"

"Don't you listen, Thompson? How the devil should I know? Maybe it has something to do with the new guidelines from the EuroCommission Public Health Committee on Epidemics. Maybe they're measuring response time. You figure it out..."

He had stuck the number on the photo and had forgotten about it till now. Pealing it off the dour face of the woman who had shared his bed through seven years of hell, he placed it by the phone and then punched in the numbers one by one, listening to the musical beeps and feeling quite ridiculous as he did.

There was ringing on the other end. Then a series of clicking sounds, probably from a re-routing device, and then ringing again.

Finally a voice answered. Abrupt. Impatient. A voice that knew its place in the world. "Hello! Who is it? What do you want? I'm in the middle of breakfast, damn it!"

"This is Cambridge Environmental Health," said Thompson, so cowed and embarrassed that he forgot to wonder who he had been connected with. "I was given this number to call..."

He could hear the voice on the other end talking to someone else, in muffled tones, "It's Cambridge EHO." Then, more muffled, another voice said, "Bloody hell!" Finally the person on the other end spoke directly into the mouthpiece again, "How serious is it?"

"How serious is what? I was given this number to ring if something unusual happened. I don't really know what's meant by 'unusual', but there's been a number of admissions for pulmonary insufficiency, mainly from the Chesterton area, the Northeast of the city. I suspect it's nothing more than a statistical aberration, but I thought I better check..."

"Quite right," said the voice at the other end, with a patronising sigh.

"I wouldn't take it seriously yet..." Bernie Thompson advised.

"Take it seriously," said the voice. "How much have you been told?"

"Nothing," said Thompson.

"Good. I think it's best we leave it that way for the time being..."

"Isn't there something I should know?"

"Nothing that would help you do your job. You know just about as much as we do, I'm afraid. We were given warning that some ecological disturbance may or may not eventuate this week somewhere in your neck of the woods."

"A terrorist plot?"

"I really can't say. Just get your investigation team together. Let us know the names of the people involved. We'll keep in touch." There was a smooth, syrupy-flavoured

chumminess the voice now projected over the phone in contrast to the grating tone just moments before. "And let's keep this conversation between ourselves..."

"Of course," said Thompson. In spite of himself, he felt almost pleased to be in favour, even though he knew the human manifestation of that electronic sound, in a normal situation, would have paid no more attention to him than to a piece of lint stuffed inside his navel.

(2)

Hungerford Bridge certainly was aptly named, thought Simon Bates as he dropped a quid into the motley seaman's cap which lay between a pair of spindly, pale-white legs. All he saw was the bloodless limbs and a knobby knee with a jagged scar that looked to him like a sadistic grin. He had let the coin drop from his hand before he had seen the scar.

At the far end of the bridge he had left fifty pence on a piece of rotting cardboard next to a filthy street urchin holding a sign which read "Help Me Feed My Dog."

The bridge stank of stale urine and faeces and Bates (as he was called, since few people knew his Christian name) cursed himself for not having walked along the north side of the Embankment to Westminster Bridge when he had come down from Charing Cross. But there he was, running the gauntlet and having to pay heavily for it.

On the other hand, what a wonderful view of St. Paul's, he thought as he took out a perfumed handkerchief and brought it up to his tormented nose. Well worth one quid fifty. He paid more than that to take his young son to the zoo and the stink there was even worse.

Bates came to the end of the bridge and walked down the stairs that led to the esplanade. But instead of heading on to the concrete monoliths of the South Bank arts complex and the vile taste it brought to his mouth, he doubled back along the Embankment toward Jubilee Gardens till he came within sight of County Hall.

The afternoon sun had started to melt into the horizon and, across the river, the houses of government rose in a great, harmonious, breathtaking silhouette. However, it wasn't that which put a crimp in Bates' stomach. He had felt rather off for most of the day. And now there was this.

Last week when he had come a few hours earlier, it had been screaming with kids eating their lollies in the heat of the sun and dropping cornettos on someone's foot. Now the green of the garden was muted. Thank goodness the little buggers had gone, he thought.

The benches were empty, except for one where a well-dressed gentleman with a lion's mane of pure white hair had placed his bowler next to his rolled-up brolley and had pulled his gold-plated specks far down his nose to better read the tabloid he held out in front of him.

Bates walked over to the bench where the gentleman was, picked up the bowler and sat himself down. "Hello, Angus," he said.

"Scandal of Killer Virus Lab!' The white-haired gentleman read the headline aloud. 'Scientists were accused last night of inexcusable failings while experimenting with a killer virus. They were forced to halt work involving a gene suspected of causing cancer after a visit from Government safety inspectors."

Then folding the paper, he placed it on his lap. "Bad business that," he said looking out at the Thames. "Bad

timing. Everything depends of timing. That's the key to everything."

"It's a storm in a teacup," said Bates. "Someone in HSE is trying to push his weight around. But there's nothing to it. The work was only classified as level 3 and the viruses were disabled - castrated, they call it. Anyway, Health and Safety are only demanding a special air-filtration system be installed."

Angus shook his head. "It's not what they want, it's where the story broke. The Daily Mail, Bates! They were supposed to be ours, weren't they?"

"They're just trying to boost their circulation," said Bates reaching for his nasal spray which he carried conveniently in his jacket pocket. He undid the top and sent a blast through his left nostril that went far into his sinuses. "But they're ours."

"They don't sound like it," said Angus, taking his bowler from Bates's lap and placing it on his head. "Wasn't that the same lab where a woman died a while back from a super bug some idiot scientist mislaid?"

"That was yesterday's news. It was forgotten the next day. By tomorrow this will be forgotten, too. People have short memories. Especially for disaster..."

"So what's this about our Cambridge facility?"

"We don't know yet. But there could be problems. Several people have come down ill. We're not sure if it's related to the work going on there..."

"Who's our local contact?"

Bates snapped open his attaché and pulled out a file. "A man named Thompson is the Regional EH chief. A simple minded bureaucrat. He'll do what we say, but he's far too stupid for something like this. We'll keep him busy with paper work and set up our own investigation …"

"We need someone we can trust. But they can't be traced to us," said Angus taking the file from Bates. He rifled through the pages. "And the less they know, the better."

"We've made a short-list," said Bates, handing Angus another set of files.

Angus looked through the dossiers with a seasoned eye. Then, handing one back to Bates, he said, simply. "He's our man."

Bates grimaced. "I know him. I've worked with him before. Not really one of us..."

"Why did you short list him?"

"The GP who phoned in the alert - she knows him. That might be to our advantage, because she, herself, is a problem..."

"What sort of a problem?"

"She has dubious connections. Married an East German back in the 60's. What concerns us more is her relationship with several environmentalist groups..."

"Then he's our man," said Angus taking his bowler and placing it back on his head. He took his brolley and used it as a lever to help him up.

Bates followed him over to the wrought iron rail that edged the bank of the river and stood there watching a passing barge carrying tons of garbage out to sea. Suddenly, Angus placed the tip of his umbrella onto the toe of Bates' shoe. "I don't need to remind you. There's a great deal at stake here."

"No, you don't need to remind me," Bates replied, feeling the metal point dig into his foot.

"That's good," said Angus lifting his umbrella and giving it a twirl. "So nothing more needs to be said, does it?"

The subterranean offices in the great, red Victorian building, where darkness and gloom were built in like a moral prerogative, had once been used to hide the fresh corpses which had been offered to the medical school by the special procurers whose methods and supplies were rarely questioned by the college. They were hungry for cadavers to be butchered by clumsy students trying vainly to slice through the middle lamella of the lumbar fascia without botching up a kidney - or so the story was told to Grant when he first moved in several years before.

He had done what he could to brighten the place up, covering the walls with tapestries and masks from his time in Africa, Buddhist sculptures from his visits to the Far East, Mayan artefacts from trips to South America and other knick-knacks from expeditions to the four corners of the globe when he had been on the payroll of the World Health Organisation. But, whatever he did, the dour air of the place, tinged with traces of formaldehyde, always seemed to filter through, staining his precious objects with a rather off-putting yellow so that in the end he took them back to his cramped apartment overlooking the British Museum.

It was a few minutes after he had returned to his office from the lecture. He was looking over a student paper, finding himself bored to tears, not so much from disinterest but from the sloppy workmanship. The paper had clearly been done in a rush, over a midnight bottle of plonk, he suspected - there were even a few reddish stains as evidence. No thought had been put into it. Not even an attempt at analysis. Just something dashed off in the wee hours of the morning and handed in like a bag of dirty socks.

He put the paper down in disgust. Why should he care? he wondered. And then he realised. He didn't anymore. It suddenly dawned on him - something he knew all the time. He hated teaching.

When he had left his job at the World Health Organisation, he had been suffering from what had been called fatigue. It wasn't an extraordinary diagnosis for someone who had travelled from disaster to disaster, from the latest drug-resistant strain of malaria in Burma to outbreaks of ancient bubonic plague in the highlands of Mexico. He could feel the gradual change coming over him long ago, from a youthful idealist on the front lines of the battle against pandemics to the mature pragmatist balancing the possible with the likely and making do with what he could get. Then came the accident at Seveso which put a mighty dent in his brightly polished armour - though he could have lived with that, since he was still convinced that he had acted properly.

But it was his time in Africa, two gruelling years in Kenya doing a study on the AIDS epidemic, that finally threw him over the brink. What he had witnessed there was, in terms of absolute horror, beyond anything he had ever seen.

Even now it continued to haunt him like an apocalyptic apparition. In his mind he would see that endless highway stretching from Nairobi to Mombassa. Along the road, all the truck stops, tiny villages with lean-to hovels, tin roofs baking in the blazing sun, heating up the stinking rooms like ovens. The ersatz beer halls, with slat wood benches and sticky tables; the tiny huts scattered in the back yards for the truckers. Dirty mattresses on the muddy ground, whores with thin, dry lips and open sores on their arms and bony legs, so wasted they could hardly keep their

stained skirts above their lanky hips. Every stop along the route had that same rank odour of beer and stale cum - the bodies, lifeless, gaunt, defiled as the land which stretched out flat and dry and grimy as far as he could see.

At the end of the road was the hospital, its wards overflowing with match-stick limbs, crammed into rooms without beds, naked in the damnable heat but too gaunt to sweat, faces with sunken eyes in lifeless heads, no longer black but an ashen shade of grey. They lingered on, half dead, clinging to a sort of zombie life that made living an obscenity.

That was the land he lived in, now, not only at night when those terrible images would flood his mind but also, sometimes, during lectures or meetings - it would happen in a instant, like a black talon ripping through his head. And rather than fading quietly into the dark corners of his brain - as most obsessions do, given time - they seemed to be coming more frequently.

It was also why teaching had become such a burden to him

This morning, for example, when he had first come in and looked around at the students, quietly seated in the semi-circular rows that ascended like the balcony of a miniature opera house in dizzying abruptness, he had hardly recognised a

single one - though this was the final lecture of term. Even as he spoke, he kept glancing, involuntarily, in the direction of a large, bald-headed man taking copious notes who stared at the lectern with grotesque eyes that seemed to bulge from his face. And he couldn't help thinking this person either had a thyroid condition or else was a serious lunatic.

His lecture had ended with his ideas on the general nature of poisons:

"The first rule to remember is that everything is a poison. The second rule - seemingly a contradiction of the first - is that nothing is a poison. The third rule is that substances which are poisonous to one organism in the biological continuum are not necessarily poisonous to another. The fourth rule, a corollary of the third, is that substances toxic to one individual of a species are not necessarily toxic to another."

He looked up and noticed the expression of dismay on several youngish faces.

"If this sounds confusing," he went on, "we only have ourselves to blame. For 'poison' is one of those words that science could readily do without. Labelling some substance as a 'poison' is similar to labelling an individual as 'evil'. Whatever we say about that person in the future, the notion of evil remains like a bad taste overriding every other impression we might have had. The same is true with a substance labelled 'poison'. Whatever else it might be, once labelled it forever lingers in the mind.

In fact, what we have seen is that any substance, any chemical or plant extract, can have either therapeutic or toxic effects on a particular organism. The equation will depend on two things - dosage and an individual's specific constitution at a certain point in time. All we can say with certainty is that the lesser quantity is curative while the greater is injurious. But the exact quantity is always relative.

Rabbits can tolerate great amounts of atropine. They can be fed for weeks on the roots, berries and leaves of *Atropa belladonna*. They can also consume quantities of cocaine that would destroy most humans without showing

signs of ill-effects. Berries from the Deadly Nightshade plant can be eaten with seeming impunity by blackbirds but they are often fatal to pigs and sheep. Spotted Hemlock, disastrous to certain imbibing philosophers, can be easily tolerated by goats. *Asperula odorata*, on the other hand, can be eaten by humans but are often deadly to geese.

For belladonna and hemlock, the toxic or therapeutic effects on humans are well-known. But how about other plants that we classify as foods? Take the mainstay of an ordinary stew, for example. How many of us know that the common potato can induce fits in some unlucky sole? Or that turnips can make some people suffer from breathlessness? Or that radishes in your salad can make someone extremely ill from its toxicological effects?

None of us would have the audacity to call potatoes, turnips or radishes 'poisons', but that's exactly what they are - to some..."

It was here that he stopped, focusing his eyes on a young woman in the third row who was waving her hand in the air. There was nothing more disturbing to him than losing his train of thought in mid sentence.

Grant looked at the young woman dressed in black trousers and a black cardigan, her light brown hair pulled severely over her head and tied into an intricate knot.

He raised an eyebrow as a sign of impatience. "Is it urgent, Miss..."

"Janet Haskel. *Ms* Janet Haskel," the women, said, putting the emphasis on the titular designation.

"Is it urgent Ms Janet Haskel?" he repeated with a restrained sigh.

"I was wondering about your basic premise," she said, totally ignoring his question as well as his desire to move

on. "If I did believe in evil, I suppose it follows that I would believe in poisons, too. Isn't that a semantic trap? I mean, doesn't the concept of 'poison' serve a useful purpose both in practice and in theory? That something can either be harmful or a remedy isn't really the issue. Aspirin can cure your headache or it can kill you. We don't call it a poison, though, since it's part of our basic arsenal of drugs. However, we do educate ourselves as to dosage and we make it clear that not following prescribed amounts can lead to disastrous results.

On the other hand, we do call arsenic a poison because we don't want to encourage its use by patients - even though it can and often is prescribed as a drug, under a different name, of course. I would think that toxicology is a useful branch of science only if we allow ourselves to call things by their proper names and establish definite parameters whereby we can determine cause and effect. That's what science is all about. The statement 'everything is relative' leaves it all up to God. Frankly, I was hoping for a little more facts and figures. Looking down at my notes, I can find little I can use, except to be careful with radishes and potatoes."

"You have a question, I suppose?" Grant asked patiently, even though he felt his stomach churn.

"Well, I suppose my question is this - as future epidemiologists, how do we make sense of everything you said? I mean, how, for heaven's sake, would we use it?"

Part of him half admired her brashness. And maybe it was a fair question after all, he thought.

"From an epidemiological perspective," he replied, "we would like to know how a certain pollutant in the environment will affect the natural habitat - or, more specifically, what its toxic effect will be on humans. Unfortunately, we

cannot do this. We can only say that, from past experience a certain toxin released into the environment will be dangerous and probably will cause certain problems, but we can never be sure which individuals will be affected and what will be their reaction.

For example, in July of 1976, an accident took place in the town of Seveso in Italy. A plant that manufactured trichlorophenol - a chemical used to make antiseptics - released a large amount of dibenzodioxins into the atmosphere contaminating an area of about 700 acres. Within a week, a number of children were hospitalised with chloracne and animals - sheep, dogs, cows, horses - began dying. The soil in an established radial area around the plant was analysed and was found to contain high levels of dioxin..."

Grant stopped for a moment and looked at the young woman who had challenged him. He could see she was concentrating on his words. "As the epidemiologist in charge, Ms Haskel, what would you have done?"

She didn't hesitate. Her response was immediate. "Because of the high levels of dioxin found in the soil, and since dioxin is known to be a teratogen in animals, all the women who were living in the exposure zones during their first trimester of pregnancy should have been offered therapeutic abortions."

"In fact, that is exactly what was done, Ms Haskel, on the advice of toxicologists who - as I said - had studied the effect of dioxin on animals. Of the 150 women contacted, thirty had abortions performed - despite the resistance of the Catholic Church."

The young woman nodded her head in approval.

"However, of the 120 remaining women who gave birth, there were only two who bore children with anomalies -

one with an intestinal obstruction, the other with a genital malformation, both of which were corrected by surgery."

"It still was the correct decision," said the woman.

"The advice on therapeutic abortions was given by toxicologists, one of whom was also an epidemiologist brought in to study the situation. It may have been proper advice based on the statistical data he had in hand, but I would be surprised if there wasn't some later doubt, some qualms..."

"Maybe that has more to say about the scientist than the science," Janet Haskel retorted, meeting his eye with a harsh, condemning look. "Without being able to make decisions based on statistical knowledge, what value is epidemiology?"

Grant felt extremely tired and his head hurt the way it did when he was coming down with the flu.

He was about to say something he would have regretted. But looking out at the younger students in the audience, he saw that they were fidgeting in their seats, seemingly embarrassed. So he ended by directing his final statement to them:

"Epidemiologists," he said, "are more like detectives than physicians. And like detectives, they can neither prevent a murder nor bring back the dead. But they can sometimes help to prevent more killings by finding the source of the gun and who it was that pulled the trigger. And in times like these, as keepers of a very troubled world, we need all the bloody help we can get..."

(4)

Recollecting the morning's disaster in his subterranean office, his thoughts were suddenly interrupted by a rap-

ping sound. Looking up, he saw a silhouette of a young woman painted in profile on the opaque glass of his office door. He rubbed his eyes, trying to erase the images and then, clearing his throat, he said, loudly - perhaps louder than he had meant - "Come in!"

The door opened. He recognised her at once and it showed on his face. "Ms Haskel. Don't tell me you're still hungry for raw flesh..."

Her hair was down and hung loosely on her shoulders. She looked much less terrifying that way, he thought. In fact, close up, her face had an almost gentle look to it.

"I thought it was a fair question," she said. "It wasn't my purpose to antagonise you."

Grant looked down at the paper he had just been reading - attempting to read, that is - and then back up at her. "It was a fair question," he said. "I don't even mind being antagonised. At least you've given the issue some thought, which, I suspect is more than most of my students do..."

"You don't even know their names!" she blurted out. Then, closing her eyes, she said, "I'm sorry..."

"It's your manner I find a bit off-putting."

She opened her eyes again and looked at him squarely. "My manner? Oh, yes..."

"You're so combative, aren't you?"

"You'd rather have us pliant, I suppose."

"Pliant? No. Polite's more the word. It isn't such a bad trait."

"Except it doesn't get you anywhere." She gave him a questioning look. "What century are you living in?"

He chuckled. "Frankly, I don't know."

The corners of her mouth had worked their way into a frown. "I'm sorry I came," she said, turning on her heels.

Grant stood up. "Wait a minute..."

She turned back around and stared at him angrily.

"Why did you come to my office? Certainly not to apologise..."

"I wanted to tell you - I'm dropping out of the course!"
"What for?"

"Financial reasons"

"Don't you have a grant?"

She gave him an ironic smile. "You really are from another century, aren't you?"

"How about your parents? Can't they help you out?"

"They don't have much of an income. Besides, there are two more after me...and I'm the girl."

"I don't want you to leave the course," said Grant. He thought a moment and then wrote something down on a pad next to his telephone. "I've got some contacts at World Health," he said. "Let me find out what kind of funds they have for research assistants..."

"Why?" she asked. "You don't even like me. And I certainly don't like you."

"You've got a good mind," he said. "You're quick, you're bright, you're intelligent. And you're angry." He put his hand on her shoulder and looked into her eyes. "I'm not asking you to agree. Just think about it. You've got passion. What you need is a little *com*passion..."

"I could say the same thing about you," she replied, pulling herself away, "in reverse."

She stomped out of the office, nearly bumping into the figure who was standing in the doorway.

How long he had been standing there, Grant didn't know. But he recognised him at once. It was the man he had seen sitting in the lecture hall - the one with the bulging eyes.

There was a ridiculous smile on his face as he entered Grant's tiny office. The kind of oily smirk that might have been on a sleazy postcard captioned "Nudge, nudge. Wink, wink."

"You didn't see 'Oleana', did you?" he asked.

Grant looked at him quizzically. "I beg your pardon?"

"The play by Mamet. Really should, you know. It might have been written just for you."

"That's why I don't go to the theatre much," Grant responded. "Plays written for me are guaranteed to be boring." Then, narrowing his eyes, he said, "Who are you?"

The man was middle - aged and balding. But his face was pink like a baby's. Or a baboon's backside, Grant thought.

"Ruddle's the name," he said, holding out a curiously tiny hand. "T. S. Ruddle..."

Grant was surprised at the softness of the skin as he reluctantly shook the man's hand. It felt like a piece of refrigerated liver and it gave him the creeps.

Ruddle put down his black leather briefcase on Grant's desk, giving the hide a gentle caress before he opened it up, retrieving a manila folder from its contents. "I enjoyed your lecture," he continued. "Especially the bit about vegetables. I always wondered why turnips made me wheeze. My wife thinks it's self-induced..."

"What can I do for you, Ruddle," Grant asked impatiently, watching in dismay as the fat, little man colonised his desk.

Ruddle's bulging eyes had a bit of a twinkle. "It's not for me, Dr Grant. Oh, Gordon Bennet! Not me! Not at all!"

"It's just a phrase," said Grant, rubbing the back of his neck. "A manner of speaking."

"Of course!" He let out a strange little laugh. "My wife always says how literal I can be. 'Ruddle', she says, 'why

are you always so literal?' 'Maybe it's my training,' I tell her. I trained as a chemist, you see. That was right before the war. Precision was the key. If you wanted a good titration, you had to follow the instruction manual to the letter. You had to be literal. But you're a scientist, Dr Grant. You know what I mean..."

"Listen," said Grant, losing his patience, "I've got quite a bit on my plate today..." He was convinced Ruddle was an insurance salesman.

The smile faded from Ruddle's lips. "Right you are, Dr Grant. I'll get to the point. It seems we need your services..."

"My services? What kind of services? What the blazes are you talking about?"

"I'm talking about past promissory notes. Bills of exchange. Obligations due." His narrow, almost hairless, eyebrows raised in a significant motion over his bulging orbs as he took out an ageing document from the folder and showed it to Grant. "That is your signature, isn't it? I'm afraid you've been seconded to us, Dr Grant."

He held the document in his hand, recalling a faint memory from the distant past and then looked up at Ruddle, at his hypnotically ugly eyes. His demeanour was no longer one of academic arrogance, but of tired resignation.

"What do you want from me?" he asked.

(5)

The 4:50 from King's Cross was a mixed assortment of early-shift commuters, tourists, student-types and other day-trippers catching the best light of a wonderful summer afternoon. The trip north, from London to East Anglia, so

dark and bleak in winter, came into its own in the late spring and early summer. Outside, the yellow fields of rape covered the rolling hills like sun-drenched carpets. And where it wasn't gold, everything was moist and green and fertile.

To Grant, journeying by train was the most pleasant and civilised way to travel. There was none of the fuss and bother of traffic-jammed highways and one could sit back, relax and watch the world go by in relative luxury. Certainly the trains were a far cry from the carriages of his youth - he still remembered with fondness the special smell of the upholstery and the quiet compartments that were so cosy and calm. But even now, even with the downgrading of service, the claw-back of little comforts like cushioned seats and writing tables, he still felt seduced by the special rhythm and the feel of great metal wheels gliding along iron rails.

The seats were nearly all filled as the train had left London. Twenty minutes later, they had reached Stevenage where many of the commuters got off. From there, the train sped on to Royston and, after off-loading more of the men in suits who neatly folded their broadsheets into their attachés, clicking them shut as they left, it proceeded on a leisurely milk run through village towns like Meldreath, Shepreth, Foxton and Wittlesford.

After Royston, those who remained seemed more casual and relaxed than the stiff, pasty-faced, bankers and accountants who used the outskirts of London as their bedrooms and nothing more. Instead of polished briefcases, brightly-coloured knapsacks now predominated. There was a wholesome and organic look about the remaining passengers, Grant thought - much more to his taste than the bloodless, pin-striped regiment who lived their life by mechanical precision and woke each morning to find the

day a bland repeat of the one before and the one that would follow.

In the seat across from him, facing his way, was a young couple - a thin young man with a boyish face, thick hair swept back, unparted, spectacles with circular black frames; and a young woman, dark eyes, long, dark hair, wearing a loose-fitting frock of pink and yellow.

He lay back against the head rest and wondered at the strange chain of circumstances that brought him here.

The documents Ruddle had left him were of little help. A few extracts from hastily faxed medical records showing nothing more than several cases of some sort of pneumonic ailment. Too early for lab results on cultures. Nothing else significant except vague references to epidermal markings. Yet the whole thing was being taken seriously enough to have confidentiality stamps of the highest category on almost every page.

What was his mission? he had asked.

To find out if there was any cause for concern. To make sure all information was transmitted directly to the Agency. And to keep a lid on it should anything eventuate. That's all Ruddle would say.

"Ridiculous!" Grant had objected. "You claim there's a suspected environmental hazard, but you won't tell me what you suspect!"

"Information comes to us in various ways," Ruddle had said as he packed up his briefcase with the obsessive care of someone who brushes their dentures after every meal. "Like an elaborate puzzle, sometimes a piece is important because it has been given to you by someone who, for one reason or another, knows nothing else except that it is important."

Why him? he protested. Certainly there were plenty of competent people up there who could be relied upon?

But he had been requested especially by someone on the Cambridge team. Someone he knew, Ruddle had said. A GP named Pauline Quail.

He had phoned her right after Ruddle had left.

"It's good to hear your voice," he had said. "I'm surprised you're still in Cambridge."

"How are you, Peter?" she had asked. Her voice had sounded genuinely concerned. But that was one of her talents, he had remembered.

"Fine..." he had replied.

There was a brief, awkward silence. Then she had said, "Peter, I need your help... it's a professional problem," she had hastened to add.

"I know. Environmental Health contacted me. What's going on up there?"

"There's been some curious illnesses I've been seeing in the last few days. They've all been preliminarily diagnosed as mycoplasma infections but there's something about them that concerns me - the suddenness of the reaction, the severity..."

"We've been seeing new forms of mycoplasma with reactions like that," he had said.

"Some of my patients are quite ill. And they don't seem to be responding to treatment..."

"It's a feature of these new bugs that they tend to be antibiotic resistant..."

"Yes, but there are other things. They all have a peculiar type of skin eruption. I've never seen exanthema like that..."

"How many are in hospital?" he had asked.

"I've sent five to Addenbrooke's so far...for respiratory insufficiency."

"What do they say up there?"

"They're still doing tests. But, I've seen several others this morning..."

"Well, it doesn't sound like there's much to go on. Until the hospital lab reports come in..."

Suddenly, her voice sounded ominous to him. "Peter, there's something else..."

"What?"

"Maybe it's better if we don't speak over the phone..." she had said.

As he listened to that conversation again in his head, he thought of Pauline. He let his mind drift back to half-forgotten days.

The train jolted as it hit a bend in the track. He became aware that the girl sitting across from him was looking in his direction. She was no more than twenty, he reckoned. Her smile, the unconscious bloom of youth, filled her face with a glowing radiance.

He closed his eyes and saw himself on a Burmese train, outside Rangoon. A sweet odour of orange blossoms and cinnamon filled his nostrils and he sensed the closeness of a warm, soft, fragrant woman. She was dressed in white linens which clung to her figure like silk. Her bare legs were tan and the blush of her face mirrored the girl who sat across from him.

They were in a hotel bedroom. Overhead, the propeller blades of the ceiling fan slowly stirred the humid air. The light, strained through the curtain's bamboo slats, fell on their naked bodies in concave stripes, twisting and bending and dancing to their motion.

He felt the cool sheets between their legs as he pressed his lips against hers, remembering the salty, erotic taste of her mouth.

Then everything started to change. All at once he was no longer a participant but staring down at her from above. He saw her colour was turning from flush to pink to grey before his eyes. The noise that emitted from her mouth wasn't desire but a mournful cry for help.

Suddenly his head was filled with a shrill, deafening sound and an explosion of hot red light, of fire...

"Are you all right?" The young man's hand was on his shoulder, gently shaking him.

He opened his eyes and tried to orient himself, remembering where he was.

"You fell asleep," said the girl.

Grant got up from his seat. His body felt ungainly and clumsy. "I'm sorry..." he said.

"You must have had a nightmare," the girl replied with a soft, understanding smile. "It happens to me..."

He made his way to the toilet and locked himself inside. He pressed down the tap, letting the water run into the sink until it flowed cold and then splashed it onto his face.

The train lurched. He felt his legs give way and he grabbed the toilet rail to steady himself. Then and only then did he notice his image in the mirror above the sink. It took a moment before he recognised who it was.

An instant later, he came to his senses. He shook it off as a passing attack, a slight nervous disorder. Nothing more.

At the same time, he felt the train grinding to a stop and he heard the driver's voice intoning over the speaker:

"Cambridge next. All passengers must alight..."

She was waiting for him at the station. When he first saw her standing there among the fresh-faced students rushing to get their bicycles from the tangled forest of rusty metal in the parking lot, he was struck by how much she had aged - and how little. Her figure, still slim, seemed to carry extra weight, if not added poundage. And her eyes no longer had that unquenchable look of innocent adventure. But he thought there was something ageless about her welcoming smile as he made his way through the crush to greet her.

He gave her a kiss on her cheek as she held his hand and squeezed it gently. "It's so good to see you again, Peter," she said. And then, taking him by the arm, she led him outside to a Citroen 2 CV, which would have been bright yellow if it hadn't been so dirty.

"Are you hungry?" she asked, opening the passenger door for him and throwing some packages aside so he would have someplace to sit. She didn't wait for his answer before she continued, "I know a nice place where we can talk and eat..."

....

Brown's was one of those leafy cafés so much in vogue a few years before, spreading itself lightly over a massive area and achieving both a feel of space and intimacy by the use of ferns and potted plants. According to Pauline, the food was good - tasty and unpretentious. She liked it because they didn't molest their vegetables.

Grant enjoyed a good meal, too, but he was more thirsty than hungry at that moment. He ordered a bowl of bean and garlic soup cooked in wine and olive oil - which

Pauline highly recommended - and a salad to have along with his whisky. She had the same, except Chablis was in her glass instead of Glenlivet.

They caught up on old times as they ate.

"How is Hans?" he asked her.

"He's going though hard times, I expect - just like the rest of the left oppositionists. They had such great hopes for the future, but instead they found themselves overwhelmed by the stampede to the free marketplace." She glanced down at her drink and ran her finger around the rim of the glass. "I haven't seen him for several years. I hear about him through Cicely..."

Then, looking up at Grant, she smiled in the manner of someone briefly recalling a past romance. "What about you, Peter? I heard you had taken a post at the university..."

"After I got back from Africa," he said. "I went through a pretty bad patch. The university job probably saved me from myself. But now it's starting to grow old..."

"Why's that?"

He shrugged. "I'm just not cut out to be a teacher, I suppose..."

"Of course not. You're a field epidemiologist. One of the best I've ever known..."

He cringed slightly and took a drink. "I'm not so sure," he said, putting down his glass. "Not after my experiences in Africa..." He looked at his watch and asked, "What time is the meeting?"

"We have a while yet," she replied.

She took out a packet of Benson and Hedges from her purse and offered him a cigarette. He shook his head.

"When did you and Hans split up?" he asked.

"Two - no, three years ago. But, really, we always had our separate worlds. After Cicely grew up, there was no need for pretence. Besides, he wanted to go back to Germany..."

"And you didn't?"

She laughed. "No. The German mind fascinates me, but in the end I find it incomprehensible. It's too precise. In many ways, I admire them - their ability to achieve, to make things work. But when I'm there, after a while I find myself longing for the sweet disorder which is England. Yet once back home, this country drives me mad!"

Lighting a cigarette, she inhaled deeply and then letting smoke drift out, she followed it with her eyes as it spiralled upwards and then evaporated in the air. "Hans felt a duality, himself. He understood that aspect of the German nature, that rigidity. And he rebelled against it. He looked forward to the rebirth of a new Germany. He had great trust in the youth, in young people - like Cicely..."

"How is Cicely?" he asked.

She thought a moment how best to put it. "She has fire in her eyes. She reminds me of Hans when he was young. She works as a free-lance journalist. Just as he did..."

"Here or there?"

"Everywhere. She flits in and out, depending on her passion."

Grant looked at his watch again.

"Yes, we should go," she said, stubbing out her smoke.

He motioned to the waiter and then turned back to her. "Just before I rang off this morning you were saying that something concerned you. Something you didn't want to speak about over the phone..."

"I don't know." She suddenly looked very glum, as if the whole thing might actually be a paranoid fantasy. "But I've been around for a while, Peter. I'm not the type who panics, easily..."

"I realise that," he said, "otherwise I wouldn't be up here now."

She let out a little sigh, as if what she had to say was so tenuous that it might fall apart if she breathed too hard. "When I was going through the records for the umpteenth time, I began to realise that someone in each of the households were related in a very curious way..."

"Not the patients themselves?" Grant asked.

"No. Just someone in the immediate family - the mother, perhaps, or a husband or a brother..." She stopped to take a sip of wine and then, as if trying to visualise something, she rolled the chilled glass against her cheek. "I used to be involved with an organisation, 'Physicians for Peace' - I think I might have sent you some literature..."

"I seem to remember something about that," he nodded, while thinking he probably filed it with the rest of his unwanted mail in the rubbish bin.

"It originally started out as a way of sensitising people to the madness of atomic war, but it grew into a general critique of the nuclear industry. Now it's broadened even more - taking in a gamut of ecological problems - everything from toxic waste dumps to oil spills."

"A general purpose, one - size - fits - all, do-good operation, I suppose." The look he gave her said everything.

"Crikey!" She let out a frustrated laugh. "What are you going to think of me now?"

"I'll think what I've always thought. That you're a good friend and a good physician who cares a hell of a lot more

about her patients than most GP's - and is currently under a lot of stress," he replied.

She looked up at him. Her eyes were wet and glistening. It was a different person. Someone he'd never seen before. Her voice was soft but the tone was almost pleading as she spoke: "Peter, I know something is wrong. I feel it."

It wasn't that he knew how to respond. On the one hand, he was struck by her open sincerity. On the other, he cringed at such a clichéd manipulation of logic. He wasn't one who easily fell for weepy protestations. But she wasn't someone who often wept.

He stood up, brushing off some invisible crumbs. "Let's go," he said, taking some bills out of his wallet.

"Don't you dare," she said, taking money out of her purse at the same time. "You're my treat tonight!"

(7)

The small conference room at Addenbrooke's was simmering. Not from extreme temperature, though the poor ventilation system contributed to the stuffy atmosphere, but from the agitated people inside.

Four men in suits were seated at a round table. From their tired expressions and manner of dress, Grant could tell they were administrators. Standing, clustered in the corners of the room were several knots of people - medical staff and technicians from the look of their outfits - engaged in animated discussions. The contrast between the people seated at the table and those standing at the fringe was quite stark. It was as if two different nations on one ship were charting a course to opposing harbours.

A short grey man, with a face like a ferret, was making a very loud point and emphasising it with a gesticulating finger as Pauline Quail led Grant through the door. Even from across the room, his bright red cheeks, burning with indignation, made him stand out.

"That's Thompson," Pauline said, pointing to the ferretfaced man as she and Grant entered the conference room. "As you can see, he doesn't exactly exude patience."

"You'd better introduce me," said Grant. His voice was less than enthusiastic.

The intense verbosity seemed to ricochet off the walls as they walked over to the most heated corner.

"You have absolutely no authority to be doing this!" a man with a stethoscope hanging round his neck was arguing loudly. The listening device was bouncing wildly on his chest as he made he spoke.

"We have every authority!" shouted Thompson. "In a state of emergency we could take over the whole bloody hospital!"

"What emergency?" a woman medic shouted. "What emergency are you talking about? You should have been here last winter! Where the hell were you when we needed extra beds?"

"Excuse me," Pauline Quail said, pushing herself into the fray. "I hate to interrupt, but I need to speak with you, Bernie..." And saying that, she took him by the arm and guided him from the angry vortex like a vessel being towed from a whirlwind.

If Bernie Thompson was grateful, he didn't show it. "You were supposed to be here fifteen minutes ago," he hissed, glancing at his watch.

"I was delayed, Bernie," she said, moving quickly to the side of the room where Grant was waiting. It was as if the sooner she got there, the quicker she would be released of her charge.

"Bernie Thompson. Peter Grant." She introduced them succinctly and then stepped back.

"You're from CDSC?" asked Thompson, shaking hands.

"I work with them on a consultancy basis," said Grant.

Thompson lowered his voice. "I don't know what we've got ourselves into here. We've really stirred up a hornet's nest..."

"Well then maybe we'd better calm things down," said Grant, looking over at the table.

One of the administrators had stood up. He was a tall, angular man with silver streaks in his hair dressed in a well-cut suit that established him as management's top rung. Pulling out a watch from the pocket of his waistcoat, he said, "Gentlemen - and ladies. I think it's time..."

The response wasn't immediate, but people did start drifting toward the table.

It took a few minutes before the room came to order.

"That's Netsworth," Pauline Quail whispered to Grant, as they sat down with Thompson, making their own little contingent at the round table. "He's Mr Big Wig here..."

Netsworth was one of those natural managers who had the personal presence which established some kind of discipline over chaotic situations without actually doing anything but being there. But today even Netsworth seemed unable to project a sense of calm.

The reason for all the confusion lay in the way disease control was structured. Under the National Health Services Acts, local and district health authorities shared re-

sponsibility for the prevention and treatment of notifiable and other communicable disease. It was left to the DHSS medical division to offer "help and guidance" on the control of such diseases through the Public Health Laboratory Service.

After World War II, with the changing patterns in international travel, the need was established for a national epidemiological service. But it wasn't until 1977 that the Communicable Disease Surveillance Centre was set up as part of the Public Health Laboratory under the direct control of the Chief Medical Officer of the DHSS.

Executive powers for the control of disease, however, still lay with the local and regional authorities. Though coordination with PHLS, DHSS and the World Health Organisation was understood to be necessary, the command structure was loose.

This worked fine during ordinary outbreaks of influenza and reportable diseases like measles and tuberculosis. The problem was how to establish a procedure when an unexpected epidemic arose - a disease of a different kind. Especially when it was unclear whether a new disease was there at all.

It was because of this organisational confusion that a rump meeting had been called at the hospital to establish boundaries after Bernie Thompson had tried to bully the administration into closing off an entire ward for the dozen or so cases of respiratory insufficiency that had been sent there over the last two days.

Represented at this meeting were the top level hospital administrators, the ranking consultants, the chief pathologist and the head matron from nursing services. Pauline Quail was representing the local health authority; Bernie Thompson, regional health and Peter Grant was introduced

as the consultant epidemiologist (ostensibly from DHSS, though that was never stated).

Netsworth cleared his throat to gain attention. "There seems to be a lot of confusion as to what actually is going on," he said, directing his statement to Bernie Thompson. "So maybe we could begin by discussing why a news quarantine was imposed..."

A number of heads around the table nodded in agreement.

"Suggested," Bernie Thompson put in.

"...suggested," Netsworth allowed. "But why even suggest a news blackout for something that essentially is a non-event?"

"What we have so far are twelve cases of atypical pneumonia," the senior consultant, a man named Browder, said.

"Fourteen," the head matron, corrected. "Two more were admitted in the last hour."

"All right, fourteen," Browder went on, a little perturbed to have been contradicted by his own staff. "It may be a cause for concern, but how the blazes does it warrant this kind of intrusion?"

"They really are territorial little buggers, aren't they?" Pauline Quail whispered to Grant.

"Unless, of course, there's something those jolly little gentlemen at CDSC aren't telling us." The younger consultant, a pleasant looking man named Roger Cook, gave Grant a significant glance.

Grant suddenly realised that the other members of staff were staring at him too. He rubbed the top of his head, wondering how the hell he'd got into this mess. There was nothing to do, he thought, but wing it. Especially since Bernie Thompson was clearly the kind of negotiator who used a blunderbuss where a feather duster was called for.

"There's nothing that the Communicable Disease Surveillance Centre could add to what you already know," said Grant. "It's true that we're taking any cluster of atypical pneumonitis very seriously now. The question of a voluntary embargo on news should be obvious. Scare stories of drug resistant strains of mycoplasmas and mutant viruses create the kind of panic reactions that flood the surgeries and make it harder to weed out the 'sympathetic' cases from those that are real. Look what happened when the Indian Bubonic plague scare hit the headlines. Every Asian with a cough was suspect. At the outset, at least, until we can verify that there is no correctable environmental factor at work, we find it's best to keep a low profile."

Grant looked squarely at Netsworth. "However, we're here strictly on an advisory basis. No one's trying to tell you how to run your hospital."

"With all due respect, it still sounds to me as if you're being somewhat less than forthright," said Cook, the younger of the two consultants.

"I think we'll have to take the gentleman at his word," said Netsworth, somewhat mollified by Grant's approach. He looked over at an elderly man with a spotty complexion whose nose had the tell-tale signs of over-indulgence. "Morton, what do we have from the lab?"

Morton Franks was the chief pathologist. He was due for retirement and was just coasting through his final months. "Nothing yet," he said in a bored tone of voice. "The early cultures show some possibility of mycoplasmas in several patients, but they could be false reads..."

There were so many mycoplasmas floating around hospital labs that it was easy to pick up false readings. This was why early cultures were never the best.

"I'll bet my boots it's not a mycoplasma," said Pauline Quail.

"Have we ruled out *Legionella*?" asked Browder looking over at the pathologist. He was referring to the bacteria that caused Legionnaire's Disease.

"We can't rule out anything this early," said Franks.

"I think we'll be able to rule that out quite fast once the epidemiological survey gets started," said Grant.

"So we're agreed about the quarantine? And an isolation ward?" Netsworth asked.

"Temporarily," said Browder, with a mannered disdain. "I think we'll see this blow over in a day or so."

"I'd like to point out that there's some difference between us," said Cook. His face appeared tense and angry. "From the patients I've examined, I believe we should be taking this very seriously indeed! The X-rays I've seen conform much more to a severe pulmonary oedema than to atypical pneumonia. That and the very peculiar exanthema lead me to suspect a possible toxic-allergic syndrome."

"What's your response to that, Carl?" Netsworth asked, turning to Browder.

"I'll wait for the lab reports," Browder mumbled. There was clearly no love lost between the two consultants.

"Have you tested for eosinophilia?" asked Grant, looking at the younger consultant.

"It's on order," Cook replied. "When can you get us your epidemiological data?"

"Set a meeting for tomorrow afternoon," said Grant. "I'll give you a report on my findings."

"Where are you staying?" Bernie Thompson asked Grant as they headed out of the conference room. "If you don't have a place, we could see about hospital quarters."

"I've got plenty of room in my house," Pauline said. She was walking between the two men. "You'd be a lot more comfortable there. You're also welcome to use my carthough you might find things more accessible on bicycle."

"Then I'll be off," said Thompson, "We'll meet at my office at nine."

He left, mumbling, "Don't expect you'll find there's much to it."

"I just want to look in on a patient," Pauline said to Grant when Thompson had departed. "Why don't you come along?"

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The open wards stretching out from the central corridor were antiseptic clean but the colour scheme and the plainness of the architecture made everything seem dreary. Only the occasional vase of flowers or the cheery clothes of a carefree visitor gave hope to the notion that somewhere outside those halls might be a world brighter than this.

It was one of Pauline's gripes. "I'm not saying everything has to be brilliant orange or there should be great smiling faces painted on the walls to elevate the mood. But that infernal shade of green!" Pauline shook her head. "Why do hospitals have to look so much like - hospitals?"

"At least this one has beds and cleans the blood off the floor," Grant replied, following her down a corridor that jutted left and then seemed to go on forever. He felt that compared to what he saw on his travels, the English didn't know how lucky they were.

"I hope you can say that next year," she answered back. Addenbrooke's had a fine reputation and, regardless of Pauline's critique, he was struck by its apparent efficiency. He sensed it in the demeanour of the staff, especially the nurses and orderlies, who didn't have that haggard, almost desperate look so often seen among institu-

tional employees who felt themselves aboard a floundering boat, bailing out just enough water to keep it afloat.

A sign over the doorway indicated the children's ward was off to the right, down an adjoining corridor. However, Pauline continued straight along till she reached another set of doors marked 'Infectious Wards - Restricted Access'.

"She's being kept in isolation until the lab results come in," Pauline explained.

Entering the area, she went immediately to the nurses' station and chatted briefly with the young woman on duty. She was given two gauze masks, one of which she gave to Grant. Then, tying the flimsy mask over her nose and mouth she walked over to the room pointed out by the nurse.

She gave a quick, perfunctory tap at the door before opening it. Grant, tying his mask on, followed her inside and closed the door behind him.

The dimmer switch connected to the overhead light had been turned half-way, so that the bed with the plastic canopy, set in the middle of the room, was mercifully free from the over-lit glare other wards had to suffer.

The first thing that struck him was the almost reverential stillness which centred all attention on the shallow, rasping sounds emanating from the bed. It was only when his eyes adjusted to the diminished light that he saw the couple sitting quietly at the side.

There was always something curiously surreal about the wearing of veils, Grant thought to himself. With the lower

half of the face swathed in gauze, the focus of expression was the eyes. And, even if the eyes weren't the gateway to the soul, they said a lot about the heart. In the case of the two figures sitting there so still, they spoke of misery.

The couple stood up as Pauline came over to them. She hugged the woman and took the man's hand as warmly and easily as she had taken Grant's when she had met him at the railway station.

They spoke in whispers.

"How is she?"