## THE HOME FRONT

## **Brian Stableford**

NOW that we have lived in the security of peace for more than thirty years a generation has grown up to whom the Plague Wars are a matter of myth and legend. Survivors of my age are often approached by the wondering young and asked what it was like to live through those frightful years, but few of them can answer as fully or as accurately as I.

In my time I have met many doctors, genetic engineers, and statesmen who lay claim to having been in "the front line" during the First Plague War, but the originality of that conflict was precisely the fact that its real combatants were invading microbes and defensive antibodies. All its entrenchments were internal to the human body and mind. It is true that there were battlegrounds of a sort in the hospitals, the laboratories, and even in the House of Commons, but this was a war whose entire strategy was to strike at the most intimate locations of all. For that reason, the only authentic front was the home front: the nucleus of family life.

Many an octogenarian is prepared to wax lyrical now on the reelings of dread associated with obligatory confinement. They will assure you that no one would risk exposure to a crowd if it could possibly be avoided, and that every step out of doors was a terror-laden trek through a minefield. They exaggerate. Life was not so rapidly transformed in an era when a substantial majority of the population still worked outside the home or attended school, and only a minority had the means or the inclination to make all their purchases electronically. Even if electronic shop-pimg had been universal, that would have brought about a very dramatic increase in the number of people employed in the deliv-ery business, all of whom would have had to go abroad and inter-act vith considerable numbers of their fellows.

For these reasons, total confinement was rare during the First Plague War, and rarely voluntary. Even I, who had little choice in the matter after both my legs were amputated above the knee following the Paddington Railway Disaster of 2119, occasionally sallied forth in my

electrically-powered wheelchair in spite of the protestations of my wife Martha. Martha was almost as firmly anchored as I was, by virtue of the care she had to devote to me and to our younger daughter Frances, but it would have taken more than rumors of war to force Frances' teenage sister Petra to remain indoors for long.

The certainty of hindsight sometimes leads us to forget that the First Plague War was, throughout its duration, essentially a matter of rumor, but such was the case. The absence of any formal declaration of war, combined with the highly dubious status of many of the terrorist organizations which competed to claim responsibility for its worst atrocities, sustained an atmosphere of uncertainty that complicated our fears. To some extent, the effect was to exaggerate our anxieties, but it allowed braver souls a margin of doubt to which they could dismiss all inconvenient alarms.

I suppose I was fortunate that the Paddington Disaster had not disrupted my career completely, because I had the education and training necessary to set myself up as an independent share-trader operating via my domestic unit. I had established a reputation that allowed me to build a satisfactory register of corporate and individual clients, so I was able to negotiate the movement of several million euros on a daily basis. I had always been a specialist in the biotech sector, which was highly volatile even before the war started—and it was that accident of happenstance more than any other which placed my minuscule fraction of the home front at the center of the fiercest action the war produced.

Doctors, as is only natural, think that the hottest action of the plague wars was experienced on the wards which filled up week by week between 2129 and 2133 with victims of hyperflu, assertive MSRA, neurotoxic Human Mosaic Virus and plethoral hem-orrhagic fever. Laboratory engineers, equally understandably, think that the crucial battles were fought within the bodies of the mouse models housed in their triple-X biocontainment facilities. In fact, the most hectic action of all was seen on the London Stock Exchange, and the only hand-to-hand fighting involved the sneakthieves and armed robbers who continually raided the nation's greenhouses during the six months from September 2129 to March 2130: the cruel winter of the great plantigen panic.

I never laid a finger on a single genetically modified potato or carrot, but I was in the thick of it nevertheless. So, perforce, were my wife and children; their lives, like mine, hung in the balance throughout. That is why my story is one of the most pertinent records of the First Plague War, as well as one of the most poignant.

Although my work required fierce concentration and a readiness to react to market moves at a moment's notice, I was occasionally forced by necessity to let Frances play in my study while I worked. It was not safe to leave her alone, even in the adjacent ground-floor room where she attended school online. She suffered from an environmentally induced syndrome which made her unusually prone to form allergies to any and all novel organic compounds.

In the twentieth century such a condition would have proved swiftly fatal, but, by the time Francis was born in 2121, medical science had begun to catch up with the problem. There were efficient palliatives to apply to her occasional rashes, and effective ways of ensuring that she received adequate nutrition in spite of her perennial tendency to gastric distress and diarrhea. The only aspects of her allergic attacks which seriously threatened her life were general anaphylactic shock and the disruption of her breathing by massive histamine reactions in the throat. It was these possibilities that compelled us to keep very careful control over the contents of our home and the importation of exotic organic molecules. By way of completing our precautions, Martha, Petra and I had all been carefully trained to administer various injections, to operate breathing apparatus, and—should the worst ever come to the worst—to perform an emergency tracheotomy.

Frances was very patient on the rare occasions when she had to be left in my sole care, and seemed to know instinctively when to rnaintain silence, even though she was a talkative child by nature. When business was slack, however, she would make heroic attempts to understand what I was doing.

As chance would have it, she was present when I first set up my position in plantigens in July 2129, and it was only natural that she should ask me to explain what I was doing and why.

"I'm buying lots of potatoes and a few carrots," I told her, oversimplifying recklessly.

"Isn't Mummy doing that?" she asked. Martha was at the supermarket.

"She's buying the ones we'll be cooking and eating. I'm buying ones that haven't even been planted yet. They're the kind that have to be eaten raw if they're to do any good." "You can't eat raw potatoes," she said, skeptically. "They're not very nice," I agreed, "but cooking would destroy the vital ingredients of these kinds, because they're so delicate." I explained to her, as best I could, that a host of genetic engineers was busy transplanting new genes into all kinds of root vegetables, so that they would incorporate large quantities of special proteins or protein fragments into their edible parts. I told her that the recent arrival in various parts of the world—including Britain—of new disease-causing viruses had forced scientists to work especially hard on new ways of combating those viruses. "The most popular methods, at the moment," I concluded, "are making plantibodies and plantigens."

"What's the difference?" she wanted to know. "Antibodies are what our own immune systems produce whenever our bodies are invaded by viruses. Unfortunately, they're often produced too slowly to save us from the worst effects of the diseases, so doctors often try to immunize people in advance, by giving them an injection of something harmless to which the body reacts the same way. Anything that stimulates the production of antibodies is called an antigen. Some scientists are producing plants that produce harmless antigens that can be used to make people's immune systems produce antibodies against the new diseases. Others are trying to cut out the middle by producing the antibodies directly, so that people who've already caught the diseases can be treated before they become seriously ill."

"Are antigens like allergens?" Frances asked. She knew a good deal about allergens, because we'd had to explain to her why she could never go out, and why she always had to be so careful even in the house.

"Sort of," I said, "but there isn't any way, as yet, of immunizing people against the kind of reaction you have when your throat closes up and you can't breathe."

She didn't like to go there, so she said: "Are you buying plantigens or plantibodies, Daddy?"

"I'm buying shares in companies that are spending the most money

on producing new plantigens," I told her, feeling that I owed her a slightly fuller explanation.

"Why?"

"Plantigens are easier to produce than plantibodies because they're much simpler," I said. "The protection they provide is sometimes limited, but they're often effective against a whole range of closely related viruses, so they're a better defense against new mutants. The main reason I'm buying plantigens rather than plantibodies, though, has to do with psychological factors."

She'd heard me use that phrase before, but she'd never quite gotten to grips with it. I tried hard to explain that although plantibodies were more useful in hospitals when sick people actually arrived there, ordinary people were far more interested in things that might keep them out of hospitals altogether. As the fear of the new diseases became more widespread and more urgent, people would become increasingly willing—perhaps even desperate—to buy large quantities of plantigencontaining potatoes and carrots to eat "just in case." For that reason, I told Frances, the sales of plantigen-producing carrots and potatoes would increase more rapidly than the actual level of threat, and that meant that it made sense to buy shares in the companies that were investing most heavily in plantigen development.

"I understand," she said, only a little dubiously. She wanted me to be proud of her. She wanted me to think that she was clever.

I was proud of her. I did think she was clever. If she didn't quite understand the origins of the great plantigen panic, that was because nobody *really* understood it, because nobody really understood what makes some psychological factors so much more powerful than others that they become obsessions.

No sooner had I taken the position than it began to put on value. Throughout August and early September I gradually transferred more and more funds from all my accounts into the relevant holdings—and then felt extremely proud of myself when the prices really took off. From the end of September on, the only question anyone in the market was asking was how long the bull run could possibly last—or, more specifically, exactly when would be the best moment to cash the paper profits and get out.

From the very beginning, Martha was skeptical about the trend. "It's going to be tulipomania all over again," she said, at the beginning of November.

"No, it's not," I told her. "The value of tulips was purely a matter of aesthetic and commercial perception, with no utilitarian component at all. At least some plantigens are genuinely useful, and some of the ones that aren't useful yet will become useful in the future. As each new disease reaches Britain—whether terrorists really are importing them in test tubes or whether the viruses are simply taking advantage of modern population densities to spread from points of natural origin—possession of the right plantigens might well be a matter of life or death for some people."

"Well, maybe," she conceded. "But people aren't actually buying them as a matter of rational choice. It's not just shares, is it? There are plantigen *collectors* out there, for Heaven's sake, and potato theft is becoming as common as car crime."

I'd noticed that the items I'd seen on the TV news had begun to lose their initial jokey tone, but I was still inclined to laugh off the lunatic fringe.

"It's not funny," Martha insisted. "It was okay when there was still a semblance of medical supervision, but now that it's becoming a hobby fit for idiots the trade is entirely driven by hype and fraud. Every stallholder on the market is trying to talk up his perfectly ordinary carrots and every white van that used to be smuggling cigarettes through the tunnel is busy humping sackloads of King Edwards around. You never get out, so you don't know what it's like on the streets. All you ever see are figures on the screen."

"Share prices are just as real as anything else in the world," I said, defensively.

"Sure they are—and when they go crazy, everything else goes crazy, too. Soon there won't be a seed potato available that isn't allegedly loaded with antidotes to everything from the common cold to the black death. Have you seen what's happening to the price of the stock on the supermarket shelves, since the local wide boys started selling people do-it-yourself transformation kits? It's ridiculous! I wouldn't care, but ever since the gulf stream was aborted, the ground's as hard as iron from October to April. No one who buys a magic potato

now can possibly cash in on his investment until next summer, so it's open season for con men."

"That's one of the factors driving the spiral upward," I observed. "The fact that nobody can start planting for another four or five months is making people all the more anxious to have the right stock ready when the moment comes."

"But the hyperflu won't wait," she pointed out. "It'll peak in February just like the old flu used to do, and if the rumors are right about human mosaic viruses, *they* won't mind the cold either, because they can crystallize out. If neurotoxic HMV does break out in London, the most useful weapons we'll have to use against it are imported plantibodies from the places where it's already endemic. Why aren't you buying those by the cartload?"

I had to explain to her that putting money into foreign concerns isn't a good idea in a time of war, especially when you don't know who your enemies are.

"But we know who *our friends* are," she objected. "Spain and Portugal, the southern USA, Australia . . . they're all on our side."

"Perhaps they are," I said, "but it's precisely the fact that we're still semiattached to the old Commonwealth and the European Federation while maintaining our supposedly special relationship with America that puts us in the firing line for practically every terrorist in the world. Then again, anxiety breeds paranoia, which breeds universal suspicion—how can we be sure that our friends really are our friends? Trust me, love—I know what I'm doing. Whether it's wise money or not, the big money is flooding into the companies that are trying to develop plantigens against the entire spectrum of HMVs, especially the ones that don't exist yet although their gene-maps are allegedly pinned to every terrorist's drawing board. This bubble still has a lot of inflation to do."

There's a world of difference, of course, between wives and clients. Martha was worried that I was pumping too much money into a panic that couldn't last forever, but the people whose money I was handling were worried that I wasn't committing enough. Most of my individual clients were the kind of people who didn't even bother to check the closing prices after they finished work in normal times, but the prevailing circumstances changed nine out of every ten of them into the

kind of neurotic who programs his cell phone to sing the hallelujah chorus every time a key stock puts on five percent.

There is something essentially perverse in human nature that makes people who can see themselves growing richer by the hour worry far more about whether they ought to be growing even richer even faster than they do about the possibility of the trend turning turtle. I'd never been pestered by my clients half as much as I was in January and February of 2130, when every day brought news of hundreds more hyperflu victims and dozens more rumors about the killing potential of so-called HMVs and plethoral hemorrhagic fever. The steadily increasing kill-rate of iatrogenic infections didn't help at all, although there was little evidence as yet of assertive MRSA migrating out of the wards.

I weathered the storm patiently, at least until Petra decided that it was time to start a potato collection of her own.

"Everyone's doing it," she said, when the true extent of her credit card bills was revealed by a routine consent check. "Not just at the tech, either. The playground at the secondary school's a real shark's nest."

"Sharks don't build nests," I said, unable to restrain my natural pedantry. "And that's not the point. You don't know that any of those potatoes has any therapeutic value whatsoever. Even though you've been paying through the nose for them, the overwhelming probability is that they haven't. You're a bright girl— you *must* know that."

"Well, whether they have or they haven't, I could sell them all for half as much again as I paid for them," she said.

"So do it!" I told her. "Now!" Even that seemed moderate, given that the profits she was contemplating were entirely the produce of misrepresentation. But there were limits to the extent of any holier-than-thou stance I could convincingly maintain, as she knew very well.

"But you of all people," she complained, "should appreciate that if I wait until next week I'll get *even more*."

"You can't guarantee that," I told her. "If you hang on to them for one day—one *hour*—longer than the bubble takes to burst, all you're left with is debts. Debts that you still have to pay off, even if it takes you years."

"I know what I'm doing," she insisted. "I can judge the mood. *I thought you'd be proud of me."* 

If it had been tulips, perhaps I would have been, but I'd meant what I'd said to Martha. Come the evil day, some plantigens would make a life-or-death difference to some people. On the other hand, it was surely safe to assume that none of them would come from potatoes traded in a schoolyard, or even in the corridors of a technical college.

"If everybody in your class knows you've got them," Martha pointed out, "that makes us a target for burglary. You know now how dangerous that could be, with Frances in the house. You know we have to be extra careful." That was a good tactic. Petra loved her sister, and was remarkably patient about all the precautions she had to take every time she came into the house. The idea of burglars breaking in, dragging who knew what in their wake, wasn't one she could easily tolerate.

"Get rid of them, Petra," I told her, seizing the initiative while I could. "If they aren't out of the house by dinnertime, we'll be eating them."

"Hypocrite!" she said—but she knew when she was beaten.

When Petra had calmed down a little, Martha joined forces with me as we tried to explain that what *I* was buying and selling were shares in wholly reputable companies with well-staffed research labs, where every single vegetable on site really had had its genes well and truly tweaked, but Petra refused to be impressed. The only thing that stopped her from carrying on the right was that Frances had an attack, as she often did when family quarrels were getting out of hand. Ventolin and antihistamines stopped it short of a dash to the hospital but it was a salutary reminder to us all that if hyperflu ever crossed our threshold, we'd have at least one fatal casualty.

As hyperflu's kill-rate increased, so did the rumors. It's never easy to tell "natural" rumors from the ones that are deliberately let loose to ramp prices upward, and there's little point in trying. As soon as they appear on the bulletin boards rumors take on a life of their own, and their progress thereafter is essentially demand-led. No rumor can be effective if people aren't ready to believe it, and if people are hungry to believe something no amount of common sense or authoritative denial will be adequate to kill it.

Given that the war itself was a matter of rumor, there was a certain

propriety in the fact that rumors of defensive armory were driving the whole economy.

Looking back from the safe vantage point of today's peace, it's easy to dismiss the great plantigen panic as a folly of no real significance: a mere matter of fools rushing to be fleeced. But bubbles, however absurd they may seem in retrospect, really do affect the whole economy, as Charles Mackay observed in respect of tu-lipomania in his classic work on *Extraordinary Popular Delusions and the Madness of Crowds*, published in 1841. "Many persons grow insensibly attached to that which gives them a great deal of trouble, as a mother often loves her sick and ever-ailing child better than her more healthy offspring," says Mackay. "Upon the same principle we must account for the unmerited encomia lavished upon these fragile blossoms. In 1634, the rage among the Dutch to possess them was so great that the ordinary industry of the country was neglected, and the population, even to its lowest dregs, embarked in the tulip trade."

So it was in February and March of 2130.

It was, I suppose, only natural that the mere hint that a company had developed a plantigen giving infallible protection against hyperflu was adequate to multiply its already inflated share price three- or fourfold. It is less easy to explain why companies that were rumored to have perfected potato-borne immunizations against diseases that were themselves mere rumors should have benefited to an even greater extent. The money to feed these momentary fads had to come from somewhere, and it wasn't only the buyers who risked impoverishment. All kinds of other enterprises vital to the economic health of the nation and continental Europe found themselves starved of capital, and all kinds of biotechnological enterprises with a far greater hope of producing something useful were denuded even of labor, as the salaries available to plantigen engineers soared to unmatchable heights.

The advent of the spring thaw was eagerly awaited by everyone, because that was when planting would become possible again and all the potential stored in the nation's potatoes and carrots would be actualized. The process of actualization would, of course, take an entire growing season, but in agriculture as in the stock market anticipation is all; the initiation of movement is more significant, psychologically speaking, than any ultimate result.

I knew, therefore, that prices would continue to rise at least until the end of March and probably well into April, but I also knew that I had to be increasingly wary once the vernal equinox was past, lest the mood began to change. Collapses are far more abrupt than escalations; they can happen in minutes.

Martha continued to urge me to play safe and get out "now." She had said as much in December, January, and February, and her pleas increased their urgency at exactly the same rate as the value of my holdings.

"At least take *our* money out," she begged me, on the first official day of spring. "Your clients have far more money than we have, and fewer responsibilities; they can afford to gamble. They don't have Frances' home schooling fees or your mobility expenses to deal with, let alone the prospect of huge medical bills if more effective treatments are ever developed for either or both of you."

"I can't do that," I told her. "I can't do one thing on behalf of my clients and another on my own behalf. It would be professional suicide to admit that I daren't follow my own advice."

"So pull it all out," she said.

"I can't do that either," I lamented. "Even if my timing is spot on, I'll still miss the published peak prices. The clients never understand why it's impossible to sell out at the absolute top, and every percentage point below the published peak increases their dissatisfaction. If any of my competitors gets closer than I do, my clients are likely to jump ship. Loyalty counts for something when everything's just bumping along, but it counts for nothing in times as crazy as these. I have to get this right, Martha, or I'll lose at least half my business."

I had to compromise in the end, by cashing just enough of everyone's holdings to make certain that nobody could actually lose, but I knew that if I didn't manage to hang on to the rest until the day before the crash, if not the hour before, then those sales records would come back to haunt me. The clients would see every one as an unnecessary loss rather than a prudent protective move.

As the last day of March arrived I could see no sign of the boom ending. Every day brought new tales of horrid devices being cooked up in the labs of terrorist-friendly governments and clever countermeasures developed in our own. The pattern established in January was still in place, and the drying of the ground following the big thaw was proceeding on schedule, increasing the anticipatory enthusiasm of professional and amateur planters alike.

Everybody knew that prices could not continue to rise indefinitely, but no one had any reason yet to suppose that they would not do so for another month, or a fortnight at least. There was even talk of a "soft landing," or a "leveling off," instead of a collapse.

To increase optimism even further, the plantigen manufacturers were beginning to increase the rate at which they released actual *products*. Forty new strains of potatoes and six new strains of carrots had been released in the month of March, and there was hardly a household in the country that did not place each and every one of them on the menu, even though the great majority of the diseases against which they offered protection had not registered a single case in Europe.

I understood that this kind of news was not entirely good, because few of the new strains would generate much in the way of repeat business, and people would realize that when they actually used them. But the short-term psychological effect of the new releases seemed wholly positive.

There was no reason at all to expect trouble, and April Fool's Day passed without any substantial incident in spite of the usual crop of preposterous postings. April the second went the same way, but the fact that spring was so abundantly in the air had other consequences for a family like ours.

Even now, people think of spring as a time when "nature" begins to bloom, but that's because we like to forget the extent to which nature has been overtaken by artifice—a process which began with the dawn of civilization and has accelerated ever since. The exotic organic compounds to which Frances was so prone to form allergies were not confined to household goods; they were used with even greater profligacy in the fields of the countryside, and with blithe abandon in the gardens of suburbia.

I had hoped that 2130 might be one of Frances' better years, on the grounds that few people with land available would be planting ornamental flowers while they still had their pathetic potato collections.

Alas, the possession of alleged plantigens actually made more people anxious to prepare their ground as fully as possible, and much of the preparation they did involved the new season's crop of exotic organic compounds.

We kept the windows tightly shut, and we controlled Petra's excursions as best we could, but it was all to no avail. On the third of April, at approximately 11:30 a.m., Frances' breathing became severely restricted.

Frances was in her own room when the attack began, in attendance at her web-based school. She did nothing wrong. She logged off immediately and called for Martha. Martha responded instantly, and followed the standard procedure to the letter.

When it became obvious, at 11:50 or thereabouts, that the ven-tolin and the antihistamines were not inhibiting the closure of her windpipe, and that insufficient oxygen was getting through from the cylinder to our little girl's lungs, Martha dialed 999 and called for an ambulance. She was in constant touch thereafter with the ambulance station, which told her exactly where the ambulance was.

The traffic was not unusually heavy, but it was bad, and by noon Martha knew that it would not arrive in time for the last few emergency medical procedures to be carried out by the paramedics.

She had already told me what was happening, and I had told her to call me if the situation became critical. She would, of course, have called me anyway, and I would have responded.

Strictly speaking, I had no need to leave my computer. Martha had undergone exactly the same training as I had, and the fact that she had legs and I did not made her the person capable of carrying out the procedure with the least difficulty. To say that, however, is to neglect the psychological factors that govern such situations.

If I had hesitated, Martha would have carried out the emergency tracheotomy immediately, but I did not hesitate. I *could* not hestitate in a situation of that kind. I had always taken it for granted that if anyone had to cut my daughter's throat in order to give her a chance to live, it ought to be me. I maneuvered my wheelchair to the side of Frances' bed, took the necessary equipment out of the emergency medical kit that lay open on her bedside table, and proceeded with what needed to be done. Martha could and would have done it, but the psychological

factors said that it was my job, if it were humanly possible for me to do it.

It was, and I did.

The ambulance arrived at 12:37 precisely. The paramedics took over, and Martha accompanied Frances to the hospital. I could not go, because the ambulance was not a model that could take wheelchairs as bulky as mine. I returned to my computer instead, arriving at 12:40.

I had been away for no more than forty-five minutes, but I had missed the collapse. Shares in plantigen producers were already in free fall.

I had missed the last realistic selling opportunity by sixteen minutes.

Would I have been able to grasp that opportunity had I been at my station? 1 am almost certain that I would have been able to bail out at least part of my holdings, but I cannot know for sure. The only thing of which I can be certain is that I missed the chance. I missed the vital twenty minutes before the bubble burst, when all kinds of signs must have become evident that the end was nigh.

With the aid of hindsight, it is easy to understand how the collapse happened so quickly, on the basis of a mere rumor. When a rumor's time is ripe, it is unstoppable, even if it is absurd. The rumor that killed off the great plantigen panic was quite absurd, but it had a psychological timeliness that made it irresistible.

One of the most widely touted—but as yet undeployed—weapons of the imaginary war was what everyone had grown used to calling "human mosaic virus." There is, in fact, no such thing as a human mosaic virus and there never was. The real and hypothetical entities to which the name had been attached bore only the slightest analogy to the tobacco mosaic virus after which they had been named. Tobacco mosaic virus was not merely a disease but a favorite tool of experimental genetic engineers. Strictly speaking, that had no relevance to neurotoxic HMV or any of its imagined cousins, but the language of rumor is utterly devoid of strictness, and extremely prone to confusion.

There is and was such a thing as potato mosaic virus, which also doubled as a disease and a tool of genetic engineering. The rumor which swept the world on the third of April 2130 was that terrorists had developed and deployed a new weapon of plague war, aimed in the first

instance not at humans but at potatoes: a virus that would transform benign plantigens into real diseases: HMVs that could and would infect any human beings who ate plantigen-rich potatoes in the hope of protecting themselves.

Scientifically, technologically, and epidemiologically speaking it was complete nonsense, but all the psychological factors were in place to make it *plausible* nonsense—plausible enough, at any rate, to knock the bottom right out of the market in plantigen shares.

I wasn't ruined. None of my clients were ruined. Compared to the base from which the bubble had begun six months earlier, we had all made a small profit—considerably more than one could have made in interest had the money been on deposit in a bank. But no one—not even me—was disposed to compare the value of his holdings with their value on last October the first, let alone July the first. Every eye was firmly fixed on the published peak, weeping for lost opportunity.

And *that*, my dear young friends, is what it was really like to be on the home front during the First Plague War.

Frances recovered from the allergy attack. She recovered again the following year, and again the year after that. Then new treatments became available, and the necessity of administering emergency tracheotomies evaporated. They were expensive, but we managed in spite of everything to meet the expense. By 2136 she was able to leave the house again, and she went on to attend a real university rather than a virtual one. She was never completely cured of her tendency to form violent allergies to every new organic molecule that made its debut on the stage of domestic technology, but her reactions ceased to be lifethreatening. They became an ordinary discomfort, a relatively mild inconvenience.

By then, alas, Petra was dead. She was an early casualty, in July 2134, of one of the diseases that the ill-informed still insist on calling HMVs. She died because she was too much a part of the world, far too open to social contacts and influences. Of the four of us, she had always been the most likely casualty of a plague war, because she was the only one of us who thought of her home as a place of confinement. Petra always thought of herself as a free agent, a free spirit, an everyday entrepreneur.

We were grief-stricken, of course, because we had always loved her. We miss her still, even after all this time. But if I am honest, I must confess that we would have suffered more had it been Frances that we lost—not because we loved Petra any less, but because Frances always seemed more tightly bound to the nucleus of our little atom of community.

Unlike Petra, Frances was never free.

Nor am L

Thanks to the march of biotechnology, I have a new pair of legs to replace the ones I lost in 2119. They were costly, but we managed to meet the cost. I still have a loving wife, and a lovely daughter. I have everything I need, and I can go anywhere I want, but I feel less free today than I did on April the second, 2130, because that was the day before the day on which a prison of circumstances formed around me that I have never been able to escape. Although neither my family nor my business was completely ruined by my failure to get out of plantigens in time to avoid the crash, that was the last opportunity I ever had to become seriously rich or seriously successful. The slightlyconstrained circumstances in which we three survivors of the First Plague War have lived the rest of our lives always seemed, albeit in a purely theoretical sense, to be both unnecessary and blameworthy. If they were not quite the traditional wages of sin—with the exception of the price paid by poor Petra—they were surely the commission fees of sin.

The prison in question is, of course, purely psychological; I have not yet given up the hope of release. In much the same way, I continue stubbornly to hope that we poor and pitiful humans will one day contrive a world in which psychological factors will no longer create cruel chaos where there ought to be moral order.