

THE QUIETING OF LOUIS PASCAL

It was not until February 1993 that I finally sent a detailed response to Louis Pascal's immense letter of the previous September. At the end of March, just as I was about to set off to Europe, another of the now familiar express packages arrived by courier. It was good timing, for I was able to take a copy of the contents with me, and to read it at my leisure on transcontinental trains traveling between Vienna, Oslo, Brussels, and points in between. During the course of that trip, I was to discover that the latest sheath of papers from the founding father of the OPV theory was as fascinating as the first, but sometimes for rather different reasons.

As before, there were the generous batches of articles, and copies of his correspondence with various scientists (notably Bill Hamilton, an evolutionary biologist from Oxford University, and Brian Martin, an expert on science policy and sociology, based at Wollongong University in Australia), together with others such as Blaine Elswood and Tom Curtis. I was interested to see, in one of these letters, that Pascal acknowledged that he was probably best defined as a philosopher. But it mattered little how he was categorized, for the extent of his knowledge about AIDS clearly surpassed that of most scientists, of whatever level and discipline.

The main item in the package was a long, friendly personal letter to me, in the middle of which were two remarkably well-honed extended metaphors. The first of these likened reality to a huge boulder that topples from a cliff and shatters into a thousand pieces. He compared the unraveling of the history of the origin of AIDS to an attempt to reconstruct the boulder, piece by piece, which reveals that a large fragment from the core of the rock is missing. As the other pieces fit into place, one slowly becomes able to identify the shape of the bottom part of

the missing fragment, and also to advance a hypothesis about the shape of the upper part — perhaps even to draw a picture of what one feels it might look like. As one adds further pieces, more of the shape of the missing fragment is revealed. If one's basic hypothesis (or sketch) is wrong, one will realize this fairly quickly. By contrast, it will only be possible to prove that the missing fragment conforms exactly to one's picture of it once the last of the surrounding pieces is slotted into place. But as soon as the first of the pieces surrounding the core, representing say 10 percent of the adjoining area, is joined to the reconstructed boulder and shown to match one's sketch of the fragment, one already knows that one's hypothesis is at least somewhere close to the truth, "because there is no way that a random guess or badly false theory would produce a result that matched perfectly even over one tenth of the missing area."

His theory of origin, he implied, was like that — every time a new piece of data was added to the reconstruction, it matched the picture he had hypothesized. Other theories, by contrast, were quickly shown to be impossible. With these, a piece of broken boulder would emerge that showed the missing fragment had to be a completely different shape to that visualized, or that undermined the whole exercise by demonstrating that two or more boulders must have crashed down from the cliff above, rather than one.

His other metaphor was even more elegant. This is what he wrote:

In any moderately complex situation, there are always so many individual events that some of them must represent improbable occurrences. Say you do 100,000 things in a day. It is easy to get numbers this large if you break things down finely enough. You just took a step: that is one thing. You just blinked your eyes: that is one thing. You just took a breath: that is one thing. You just turned your head to the right: that is one thing. Well, what are the chances you would take a step, take a breath, blink your eyes and turn your head to the right all at the same time? . . . [W]ith all the step-taking and eye-blinking that you do in a day, it wouldn't surprise me to learn that you do this improbable combination of things several times in a day. And if you do 100,000 things in a day, then events so "rare" that they occur only one time in 10,000 must be occurring ten or so times every day.

This is similar to what the Wistar committee has done in its report. But there is an even worse fallacy they committed. Let us ask what are the chances that you will take a breath precisely at 5pm, blink your eyes precisely fifteen seconds later, take a step precisely 8.15 minutes later, receive a phone call precisely 1.02 hours later, etc. If you multiply enough such occurrences together, it does not take long to reach improbabilities so large that they will verge on impossibilities no matter how many individ-

ual actions you may perform in a day. But suppose your whole day has been put on video tape. . . .

Pascal went on to reason that one could easily argue (as he claimed the Wistar committee had done) that the odds against such a series of occurrences happening at such precise times were astronomical, and yet there was the videotape, which, if genuine, proved that they actually had happened. "After something has occurred, the chances that it occurred automatically go to 100%, no matter how remote might have been the odds beforehand," he wrote.

The implications for the Wistar report, with its conclusion that, because of the various improbabilities, "it can be stated with almost complete certainty that the large vaccine trial begun late in 1957 in [the Belgian] Congo was not the origin of AIDS," were obvious. Pascal's example might also be applied to the early CHAT vaccination campaigns involving some 250,000 people, a few of whom — say, for argument's sake, twenty-five, or one in 10,000 — might for particular reasons have been more vulnerable than others to becoming orally infected by a virus. Perhaps some were already immunocompromised, or had bitten their tongues just before being vaccinated; perhaps a boy had a mouth ulcer or a baby was teething.

Pascal's videotape metaphor was a neat way of illustrating that apparently unlikely combinations of circumstances can, in fact, occur. But for one to be able to *prove* that they have occurred, one has first to locate the videotape, and to establish that it is not a fake.

These were wonderful images, and they seemed to me to emanate from the mind of an exceptionally logical thinker, and one who had the great gift of being able to present ideas in a clear and easily digestible manner. However, there were other aspects of this latest letter of Pascal's that I found distinctly disturbing.

For one thing, the faint whiff of paranoia that had been apparent in September 1992 had now grown considerably stronger. Since that first letter, Koprowski had initiated his defamation suit against Tom Curtis, and Pascal was deeply concerned by the fact that Curtis had turned over all of his, Pascal's, letters to the *Rolling Stone* lawyers, raising the possibility that they might in turn be revealed to the other side's attorneys. He was also now discussing such possibilities as letters being intercepted in the mails, and scientists being paid millions of dollars to falsify archival samples, on the basis that one authentic-looking sample of HIV-1 originating from before 1957 would effectively scupper the CHAT theory. I had to admit that it was only sensible to think through the worst-case scenarios, but it seemed to me that Pascal was being overly fearful.

Then there was the hubris. The man was in many ways a genius, to be sure, but sometimes this arrogant insistence on his own intellectual superiority, and his characterizing of others as fools, was a bit hard to take. A fairly typical example was the claim he made for his hypothesis, that there was "no example in the history of science, or of any other field, of a theory that [has] had as much evidence in its favor and as little evidence against it that [has] ultimately proved importantly wrong." Pascal challenged me to refute this. I was left with the feeling that here was a man who loved to argue a theoretical point such as this, who relished the cut-and-thrust of debate, and who was absolutely confident of his ability to come up with a compelling counterargument to any alternative that one might propose. I suspected that what was actually at issue here was not the merit of the OPV/AIDS theory, but rather the confirmation of Louis Pascal's rational preeminence.

Such a declamatory stance becomes even more difficult to take when one is on the receiving end. In "What Happens When Science Goes Bad," Pascal had discussed the two major CHAT vaccinations in Leopoldville and Ruzizi, and concluded that the two campaigns must have used the same pool of vaccine.¹ In my previous letter, I had told him that this was one small point on which he was incorrect, in that I had discovered that two different pools of CHAT had been used. His response was strange, in that he told me that he doubted my claim, and "would be surprised if I could disprove" his logical deduction. I found it worrying that his first response to being told that he might have made a small error was to question the validity of my research.

Not knowing that I had already done so, Pascal suggested that I might like to follow up one of his leads by interviewing doctors Dick and Dane about the Belfast vaccinations. Furthermore, he claimed that somewhere in his papers he had seen an article or report that mentioned that the Manchester sailor had at one time been based in Belfast during his time in the navy. He was normally very careful with papers, he told me — especially important ones such as these — but this one item had inexplicably been mislaid.

Having gone through the logbooks of David Carr's ship *H.M.S. Whitby* and discovered that it had never visited Belfast during the time that he was on board, and knowing that nobody else bar David's family and the Ministry of Defence could have followed up (for nobody else had access to his service history), I suspected that Louis, having discovered that Koprowski's previous Type 1 vaccine SM had been fed in Belfast in 1956, and that the city had then housed the biggest shipyards in the world, had put two and two together and made an informed guess. Having followed this up on the ground, I felt that the more likely explanation was that of a fairly mundane coincidence.

Pascal was intent on having this putative "Belfast connection" investigated, and the lengths to which he would go were illustrated when I delved further into the package and found copies of three letters that had been sent to David Carr's

physician Trevor Stretton. Clearly Pascal wanted to get information from Stretton, but without alarming him with an account of George Dick's polio vaccinations, so instead he seemed to have concocted a complicated story. He told him that he had come across evidence that a "cell therapist" had conducted several unconventional experiments in Belfast in 1956, involving the injection of chimpanzee cells into at least fifty human beings, and that the experiments had been stopped only after several of the subjects came down with a mononucleosis-like condition, which Pascal suggested might have been an HIV seroconversion illness. Details of these procedures had never been published, he went on, but the cell therapist had written two letters to someone who had then passed them on, in confidence, to him (Pascal). He asked Stretton whether the patient who had died in 1959 could conceivably have been involved, and whether this could have been the source of his AIDS infection. A female colleague, he added, was "adamant" that she had seen an article stating either that the sailor originated from Belfast, or that he had been based there while in the navy.²

These letters to Stretton bore a different name and address, and a note to me implied that he had persuaded a friend to write them on his behalf — although it was also possible that he was adopting a pseudonym, a device he appeared to favor.³ As it happened, Dr. Stretton had mentioned on the phone a few months earlier about getting some strange letters "from a chap in New York who appears to know quite a lot about cell work," and had sent me a copy of one of them. It came as something of a shock to discover that this had actually been written by Pascal, and to realize that his desire to establish a "Belfast connection" was leading him to concoct one story for Stretton and a conflicting version for me.

I began to feel that, despite Pascal's generosity with source materials and ideas, and his tremendous desire to get at the truth, there were occasions when his sure touch and sense of direction deserted him. Not for the first time, I had the sense that he liked to view himself as the puppeteer, tensing the strings of the protagonists and, alone among them, able to view the entire stage.

Or perhaps a better analogy was that of the grand-master, who saw his various collaborators and sources as pawns, to be moved to and fro across the board as he deemed fit. "Not counting me," he wrote elsewhere in the letter, "you have a better mind than anyone else actively looking into this disease. Take care of yourself. There are many, many lives depending on you." I knew he had written in similar terms to Tom Curtis — so it seemed that he viewed the two of us, at least, as his knights, or rooks. He seemed unable, however, to see that intended compliments such as this one might come across as somewhat manipulative and condescending.

He had started off this letter by explaining that his self-imposed isolation, and his inability to talk directly to Curtis, myself, and the various scientists involved, meant that he tended to bottle things up, and this led to his letters becoming inordinately long, and to his using them as a sort of therapy. To some

extent, therefore, he was bouncing ideas around. But some of these ideas were, to my mind, far less impressive than the initial OPV/AIDS hypothesis. He now proposed a convoluted scenario of origin that involved the ancestor of HIV-1 contaminating a culture of HeLa (the immortalized human cell line), which in turn had become superinfected with another retrovirus called Mason-Pfizer Monkey Virus. This doubly contaminated HeLa culture, he suggested, might then have contaminated the monkey kidney tissue cultures used by Koprowski to make his Type 1 vaccines, SM and CHAT,⁴ thus introducing the AIDS virus to people in both Belfast and the Congo — and explaining, in one fell swoop, both the case of the Manchester sailor and the AIDS epidemic in Africa. Pascal rather sardonically referred to this series of propositions as his “Grand Unified Theory.” To me, this complicated sequence of events seemed entirely unnecessary if, as experienced scientists like Jennifer Alexander and Cecil Fox had suggested, many of the early monkey kidney tissue cultures (such as those made in the fifties) were likely to have contained lymphocytes, which could readily support HIV or SIV growth.

Another example of Pascal’s less-compelling hypotheses was his blithe claim that “I am pretty sure I have found the source of HIV-2,” when the limited details he provided, involving a vaccine campaign in Brazil, were far from persuasive. Overgrandiose claims such as these tend to end up having the opposite effect, and I found that the small, niggling doubts about Pascal’s style were multiplying.

His level of secrecy and inaccessibility only added to these reservations. In my February letter I had told him that I would be flying across to the United States some time in 1993, and that I would very much like to arrange a meeting, partly so I could bring him up to date about my own research. He now replied that this would not be possible for a number of reasons, some of which he explained. He said that he was a semi-underground person, who operated better by working on his own, and that he feared the sort of revelations that a writer or an investigative reporter would be certain to make. He also suggested that it was safer for someone like him to communicate only by letter — hinting that otherwise it would potentially be all too easy for certain of his opponents to rid themselves of their “turbulent priest.”

On one level I could understand Pascal’s desire for anonymity, and I could also see that his status as a mystery man lent a certain excitement to proceedings. Nonetheless, I was uneasy. Having a clandestine figure so deeply involved in the hypothesis, and masterminding much of the strategy, was in some respects a boon, but it demanded that the figure in question be above suspicion. And while he did indeed seem to be an honorable man and a seeker after truth, the fact that he was unwilling to give any but the most basic details about his own background, and that he apparently had manipulative tendencies, gave me pause for thought. Just as Pascal had done when reviewing the possibility of

deliberate attempts to discredit the OPV/AIDS theory, I decided to consider the worst-case scenarios.

Was it conceivable that he was providing snippets of information and a lot of hypothesis in a bid to tease out far more in return? Or even that he was a fifth columnist, working for those who would prefer to see the role of polio vaccines exonerated, and those who questioned their safety discredited? (This seemed absurd, but it still bore thinking about, in that it is a classic counterintelligence technique.)

None of these suppositions struck me as being very likely. However, I was reminded of one of Pascal's own central premises — that the real sin of omission by the vaccine-makers of the fifties was to fail to consider the disastrous consequences if there was even a 1 percent chance that the contaminating viruses in their live vaccines were not, after all, innocuous. On the same basis, if there was even a tiny chance that Pascal was less trustworthy than he seemed, then it could well be disastrous were I to tell him all about my research by letter.

There was another point to consider, also. If things went wrong; if those who proposed the OPV theory of origin ended up (as they seemed to be doing) facing million-dollar lawsuits, then it was unlikely that Pascal himself would be among the defendants. This, of course, was also true of other celebrated orchestrators of the past, such as Deep Throat in the Nixon debacle. But Deep Throat had at least been physically present in the shadows of the underground car park, so that Bob Woodward had the opportunity to see his outline, to hear his voice.⁵ With Pascal, even this was denied.

Some real seeds of doubt had been sown, and I decided that before sharing the fruits of three years of research with him (including such details as what had happened to David Carr, and the important clues that were emerging about the events at Ruzizi and at Lindi), I really did have to have the reassurance of meeting Louis Pascal in person.

I got back from the Europe trip in May, soon after which another letter from Louis arrived, this time containing a stunning refutation of a letter in *AIDS* by a Japanese team under Dr. Y. Ohta.⁶ Ohta's team had previously tested various organs from two SIV-positive African green monkeys and found that although some of these organs contained detectable virus, the kidneys did not. Furthermore, they were unable to find detectable SIVagm in oral polio vaccines made in the kidneys of African green monkeys, or find SIVagm antibodies in 190 children who had been fed the vaccine. This letter had assumed particular significance because of the stress placed upon it by the Wistar committee in its debunking of the OPV/AIDS theory.⁷

Ohta's letter concluded: "From these results, poliomyelitis vaccines may be considered not to be contaminated with SIVagm, even though they are prepared in primary kidney-cell cultures from SIVagm-infected [African green monkeys]." But Pascal claimed to have detected eleven "fatal errors" — eight in the paper itself, and three arising from the fact that the Wistar committee had used the paper in an inappropriate manner. The foremost of these shortcomings was that, in exonerating OPVs, Ohta's team had tested the kidneys of only two monkeys, when many other experiments have demonstrated that it is possible to isolate SIV from one antibody-positive animal, but not from another, or from one organ of an infected animal and not from another.⁸ Other objections included the fact that nobody could be sure which monkey species Koprowski had used; that Ohta's team had not employed PCR, by far the most accurate test for viral presence; that the cultures had not been superinfected with poliovirus or other viruses (as those used in the Congo presumably had been); and, perhaps most tellingly, that the experiments to detect SIV growth after the virus had been inoculated into AGM kidneys were "for no scientific reason" halted after four weeks, just as reverse transcriptase levels (indicating SIV growth) appeared to be rising. For these and other reasons, Pascal concluded that "The piece by Ohta et al. cannot be used to support the contention that Koprowski's monkey kidneys did not transfer AIDS' ancestor into human beings."

A few days later, I wrote back to Pascal with a lengthy reply. I complimented him on the Ohta piece, and explained that I felt that he was by far the most incisive thinker I had come across on the subject of origin. However, I added, I believed that I had probably now overtaken him in terms of primary research, including the interviewing of several of the central figures — something that he was prevented from doing. I told him that I did indeed know quite a lot more about many of the subjects in which he was interested, and said that we could potentially help each other a great deal more. But I said that I was uneasy about trusting such confidential information to the mails or the phone lines, and felt that the matter could only really be handled were we to have the chance to discuss in person.

I expected either a positive response, or a friendly declining of my request. I had no idea of the furies I was unleashing.

Three months later I received another long letter from Louis, which featured at its core an absolutely furious tirade. He lambasted me for what he later called my "demanding to meet . . . and refusing to take no for an answer," and then accused me of "playing some kind of game," without, however, giving specific instances of what he meant. He further accused me of manipulating him, saying that there were many lives depending on his concealing his identity, and that

if I did somehow discover who he was, then probably many lives would be lost. The only concrete reason he would give for this reluctance to meet was that governments and other organizations would kill in order to cover up embarrassing stories, and that "there is even the possibility that the only reason you are still alive is that they cannot make a move against you until they have located me."

This seemed not only vague, but heavily paranoid. However, a few paragraphs later, he did become a little more specific — and personal to boot. "Your overall understanding of AIDS is rather poor. This is not so much because you are ignorant, but because much that you know is not so: you are too dependent on the establishment, and they are at least as incompetent as they are evil, and vast portions of their AIDS knowledge is false, and you have believed many of these things. Moreover, there are many important things about AIDS apart from its origin that the establishment has not perceived, and you have missed these things too. And your overall understanding of how AIDS fits into the larger picture is even more poor. And these are critically important deficiencies which will lead you into many errors in your decision making. Consequently, I do not trust your judgment and am not about to give you the power to ruin everything when you do not perceive either the reasons or the danger."

This was not exactly the end of our correspondence; we did exchange a couple more letters, but it was clear that the chance of real collaboration had gone. I began to realize that despite Louis Pascal's great mind, and his great generosity with information and ideas, he was prepared to deal with people only when they played according to his rules. Sooner or later, almost everyone who dealt with him (including Tom Curtis, myself, and even Brian Martin) somehow incurred his wrath. In my case, I had dared to ask a second time for a meeting; in Brian's, he declined to publish another paper of Louis's unless he was willing to make some revisions for legal reasons.

In the end, we were all exposed to Pascal's great, self-righteous anger, and to accusations, for instance, that by our actions we were probably causing the deaths of others, sometimes in large numbers. For many of us, personal assaults such as this (combined with Pascal's insistence that he — and only he — should be protected by a cloak of anonymity) became so off-putting that they negated the many remarkable benefits of working with the man. Finally, the tension and mounting paranoia involved in this sort of contact reached such a pitch that I had few regrets when communications with Louis Pascal, the father of the OPV/AIDS theory, finally ceased.

Sometimes the light changes and, before one knows it, one's perspective has shifted also. There were always times when, despite my exasperation with Louis for his intransigence, the positive things about him remained in the foreground.

These were the times when I could see that Louis Pascal, as well as other skeptics like Tom Curtis, Blaine Elswood, Jennifer Alexander, Mike Lecatsas, Bill Hamilton, and, indeed, myself were perhaps all cast from the same mold. We were all, to differing degrees, feisty iconoclasts, quick to doubt the veracity of official pronouncements, but perhaps also a little too ready to doubt each other. In some brooding lights, I could see us suddenly as a cast of oddballs from a Beckett play, doomed forever to circle around each other muttering of collaboration, but never quite achieving it.⁹ Instead, we seemed to be forever waiting for . . . the final proof, the final reassurance.

Sometimes the shadows would shift again, and I would wonder whether we were, in fact, so very different from those iconoclasts of yesteryear — the Sabins and Koprowskis, the Coxes, Salks, and Lépins. Had not they started off, just like us, as questioners of received wisdom, as challengers of convenient assumption?