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Of course I was thrilled by this, my first real job offer, and I hastened to accept. I was to find that the salary, already less than princely on paper, was also in practice barely enough to live on in London—in fact during my first few years at LSE I was financially worse off than I had been at Christ Church. But that hardly mattered, for, as I saw it, I was finally to break free of the womb of Oxford and attain the bright lights of the capital.

In moving to London I was faced with the familiar problem of finding somewhere to live. I wrote to the London University accommodation bureau to see if they could help me out. They informed me that, at this late stage, most of the rooms on their list had already been taken; but they could offer me a room in a flat in Bayswater occupied by an elderly lady, a Mrs. Heymann. My relations with landladies, Nina always excepted, having been less than cordial, I was reluctant to allow myself to fall into the clutches of yet another resident troll. But a reprieve of sorts was granted. For when at the end of September 1968 I presented myself at the massive apartment building in Hatherley Grove in which I had arranged to take up residence, I learned that some days before my landlady-to-be had been felled by a stroke from which she was presently recovering in hospital. She had left me a key to gain access to her flat together with a note to the effect that while she was happy for me to live there for the couple of weeks (she estimated) before her discharge from hospital, she regretted that on her return my room would be needed by the full-time nurse she had been compelled to engage for her care. When I visited Mrs. Heymann in hospital she proved to be a charming and cultured *mitteleuropean* lady—the very opposite, in fact, of my conception of a resident troll. She was most apologetic that I would have to find somewhere else to live, but there it was.

All I can remember of the week or so that I spent alone in Mrs. Heymann's flat was seeing on television for the first time the late film noir *Kiss Me Deadly*. When I saw it again a number of years later I was convinced, as I had been with *1984*, that the final scenes differed from those I remembered. This was recently confirmed (2001) through the reissue on DVD of the movie with both versions of the ending—the one I saw originally, in which the protagonists struggle into the ocean to escape the exploding house, and the other version which ends abruptly with the house's disintegration¹.

¹ Directed by Robert Aldrich, released in 1955, and starring Ralph Meeker as Mike Hammer, this black and white movie is an extraordinary combination of *film noir* and science fiction years ahead of its time. One of the most startling scenes in film is that in which Hammer's search for the "great whatsit" culminates with his discovery, in a locker, of a box which he opens slightly to release a startling shaft of incandescence. Frank Devol's eclectic score, with its echoes of Hindemith and the Second Viennese School, adds a curiously appealing touch. The film is studded with memorable character actors: Fortunio Bonavia (the voice instructor in *Citizen Kane*), Paul Stewart (also in *Citizen Kane*, as the butler), Cloris Leachman, Wesley Addy, Juano Hernandez, Nick Dennis, Albert

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As it happened Jane Bridge's uncle, Tony, the Vicar of Bayswater, had just been appointed Bishop of Guildford and was in the process of vacating his old residence. He told me that I was free to doss down on the floor of the place until the installation of his successor. Having nowhere else to go at that point, I was grateful. But I was to find that he had made the same offer to a number of other homeless young people, so that the vicarage floors, while devoid of furniture, quickly became crowded with sleepers.

Nick Zafiris and Demo Dirmikis had completed their first degrees at Oxford and come to London to pursue Ph.D.s, Nick at LSE and Demo at King's College. When they learned that I was to be turned out of my digs, they suggested that the three of us look for a flat to share. So we began to pound the streets in search of accommodation, scanning each day the "Rooms for Rent" and "Flats to Let" columns of the *Evening Standard*. These were replete with unenticing ads offering "Fourth Man, Own Room" ("Fifth Man, Own Chair", would be more to the point, I ventured to suggest), but little else. The few places whose description seemed to fit our needs turned out, on further investigation, either to be situated in obscure locations such as Ongar or Cockfosters, light-years from central London, or, if more accessible, to be hell-holes in the grip of resident trolls. I recall inspecting one joint which was, the ad proclaimed, "fully equipped with hot and cold running basins". When we turned up at the place, situated in a crumbling building in Ladbroke Grove, the landlord proceeded to launch into an enumeration of the advantages of his establishment. He led us down some stairs into a damp dungeon-like chamber with a single window half buried in the earth, whose top half afforded a magnificent view of a garbage pail. Was this, I wondered, one of the so-called advantages? Apparently not, for the landlord pointed with pride at the wash-basin which had recently been attached (somewhat askew) to one wall. This "advantage" was the only one I can actually recall, but whatever the others might have been, they would have proved insufficient to induce us to take up residence there.

Finally we resorted to accommodation agencies. Our dealings with these establishments typically ran along the following lines. We first enquired of the young lady on duty whether there were available any flats for less than, say, £8 per week. After a perfunctory inspection of ledger pages, she would look up and say, dismissively, "So sorry, nothing under £8 per week." "Well, in that case," we persisted, "what about *over* £8 per week?" A slight hesitation, a somewhat lengthier riffling of ledger pages, and the reply "Er... no." "All right, then, how about *exactly* £8 per week?" At this point, having exhausted both the

Dekker, with Jack Lambert and Jack Elam as heavies. I was delighted to learn recently that Gaby Rodgers, the actress portraying the devious Pandora who is finally incinerated by the mysterious box's contents, was a grandniece of the philosopher Edmund Husserl, the intricacies of whose intellectual output I have wrestled with for a number of years.

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principle of trichotomy and the lady's patience, we would be firmly shown the door.

While our collective search for a place to live in London was proving to be a fount of humorous anecdotes, it was frustratingly barren of concrete results. So we decided to try our luck separately. As a last resort I turned to another flat agency, Rambler's, a chi-chi establishment specializing in the Earl's Court/Kensington/Knightsbridge area of London. By this time I'd have sold my soul for a broom closet and so when Rambler's came up with what they were pleased to term—in their quaint parlance—suitable accommodations, I grabbed them with both hands. The lodgings proved to be tucked under the rafters of an imposing Georgian house at 1 Ovington Square in Knightsbridge (pronounced, in the posh local accent, "Uvington Squah in Natesbridge"). In Victorian times, the house with its numerous rooms, large, small, infinitesimal, must have been the seat of a prosperous upper-middle class *paterfamilias*, and my broom closet—for that is certainly what its cramped dimensions brought to mind—the quarters of a minor servant, the second assistant bootblack, or the like. Despite the pretensions of its present owners, the place was now in truth just a boarding house, whose superior status (reflected in the high room rents) failed to camouflage the fact that every available cubic inch on the premises had been let. The resident landlord, a Colonel Kayll, whom I quickly dubbed "Colonel Bagshott", occupied a suite of rooms on the ground floor of the place. Long retired from some antique Scottish regiment, he retained a military bearing consonant with his usual attire of tweeds and regimental tie. He and his wife had separated, and he seemed somewhat lonely. I recall that one evening as I came through the front door he emerged from his quarters and invited me to partake of a wee dram. Expecting to be offered a fine single malt, I was somewhat taken aback when, as we entered his inner sanctum, he pointed to a crate of Guinness sitting on the floor and asked me to help myself. Guinness was near the bottom of my list of beverages, but to refuse would have been churlish. As I sat nursing my Guinness the old gentleman reminisced about his soldiering days, and then, out of the blue, asked me if I knew whose house this had once been. "No," I naturally replied. "Well," he continued, "at one time it was occupied by Lady Wilde, Oscar Wilde's mother, and indeed by the great man himself." I expressed surprise at this, remarking that the fact had not been signaled by one of the familiar blue plaques attached by the London County Council to the past dwelling-places of the illustrious. "True," he rejoined, "but nevertheless Oscar did live here. In fact the décor in the front room on the first floor was his conception. Would you like to see the room? I believe its present occupants are out this evening." Of course I did, and so we trooped up the stairs to view what the Colonel was pleased to call the Wilde Room. And, with its purple wallpaper and heavy velvet curtains, a splendid chamber it turned out

to be. I wasn't wholly convinced that the room had actually been refurbished by Oscar Wilde himself, but the décor looked authentic, at least to my amateur eye. Partial confirmation of the Colonel's claim was provided many years later when I learned from Richard Ellmann's sparkling biography of Wilde that Lady Wilde (and Oscar's brother Willie) had indeed resided at 1 Ovington Square.

Old Bagshott had the tiresome habit, common to resident trolls, of subjecting any tenant he might happen to meet on the stairs to a lengthy and tedious discourse. To avoid this I took to tearing down the stairs and catapulting through the front door at lightning speed, or, when collecting my mail, beetling back upstairs with equal celerity. On one such occasion the old boy caught me just as I was about to rush back to my room. When I fibbed that I'd just received an important piece of mail which required my immediate attention, he, clearly unfooled, retorted that most of *his* post came "in the form of bills".

I had never regarded Ovington Square as anything more than a temporary billet. For a start the rent was excessive owing to the fashionable location of the place, and my meager salary barely held up under the weekly outlay. There was also the irritating necessity of having to feed the voracious gas and electricity meters with which the place was replete so as not to be suddenly plunged into darkness and cold—even worse, interrupting my reading of Trotsky's *History of the Russian Revolution*, in which I was engrossed at the time, and my endlessly repeated playings of Bud Powell's *The Vintage Years* on the turntable. There were, needless to say, no cooking facilities. And as a finishing touch the "hot" (i.e. lukewarm) water boiler was turned off promptly at 9 p.m., turning late baths into spartan exercises.

Accordingly I resolved to move yet again. George Wilmers had recently returned to Oxford to finish his D.Phil., but found living there in digs stifling. It seemed natural for him to move to London, and in that case, why shouldn't the two of us share a flat? To find a suitable place we decided to look up estate agents in the telephone book and enquire directly whether they might have apartments to let. As a North Londoner by origin and preference, George regarded the region south of the River Thames as a kind of magma, so we directed our enquiries northwards. Our fancy was caught by the name of a Mr. Blumenfeld, with offices on Archway Road not far from Highgate tube station. He told us that he had a furnished flat to let on Talbot Road just a stone's throw away. The place turned out to be the first floor of a two floor apartment—two bedrooms and kitchen, together with a bathroom shared with the occupant of the floor above. The rent being quite reasonable, we took it. The bedrooms had originally served as dining room and sitting room; indeed the former had a port in one wall opening onto the kitchen. Both of us preferred the larger ex-sitting room, and it seemed only fair to resolve the issue of occupancy by flipping a coin. Losing the toss, I moved my belongings with ill grace

into the ex-dining room. In addition to adjoining the kitchen, the room turned out to have a number of further disadvantages. Its windows opened onto an alley leading to the garage entrance of *Hexagon of Highgate*, a local car dealership specializing in expensive sports vehicles. No hour of the day was free of the revving of engines and the smell of exhaust fumes as what seemed, to my ears, a constant procession of automobiles roared up and down the alley. And each evening, just as Hexagon shut down operations for the day and a blissful quiet descended outside, the floor of the room would begin to pulsate with rock music, belted out at top volume by the occupants of the flat immediately below. This was all very trying. Lucky George, in the other room, suffered none of this aural assault, and professed not to understand what I was complaining about.

There were a couple of further irritants. The first was the room's dull wallpaper—this eyesore I gleefully drowned in an ocean of white paint, a treatment to which I had yearned to subject the walls of my previous rented rooms, but in whose application I had always been frustrated by the looming presence of the resident troll. The second was the massive, and quite useless wardrobe half-filling the room—its rounded edges and faux-walnut finish the acme of style, perhaps, in the 1930s, but by the 1960s just another affront to the eye. The monstrosity stood there, inanimate but somehow threatening, like something out of a Magritte painting, its sheer bulk defying anyone to move it. But shift it I did—risking a hernia in the process—out into the corridor.

Our landlord, Mr. Clifford, could not understand why anyone would find his wallpaper or furniture objectionable, but being easy-going by nature tolerated both the obliteration of the former and the displacement of the latter. It was a different story with his wife, however, who assumed the management of the place after her husband's death, which, sadly, occurred within a few months of our arrival at Talbot Road. The flat had, we learned, been the couple's first residence after their marriage and so Mrs. Clifford's interest in the place was accordingly as much sentimental as proprietary. Not only did she take great exception to the rearrangement of her precious furniture, she was outraged at the state of the kitchen which we had, it must be admitted, reduced to a state of squalor—by her lights, at least. If she was to be believed, in her day the kitchen floors had been "clean enough to eat off of"—I speculated that she had probably done just that during her tenure. Clearly "Mrs. Cliffhanger", as I came to call her, meant trouble.

George and I got along reasonably well, but inevitably there was some friction between us. In the aftermath of my affair with Sandy I had been suffering from depression and insomnia, for which I was receiving medication from a doctor in Ladbroke Grove. My disturbed mental state may have caused me to behave oddly—certainly George had every reason to be irritated by the contrariness of my behaviour. I

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squirm with embarrassment, for instance, to recall the occasion the two of us had accepted an invitation to attend a party organized by a fellow we had met in a pub a few days previously and with whom both of us had become quite friendly. At the very last minute I decided, perversely, that I didn't want to go, leaving a wrathful George with the burden of making excuses for my non-appearance.

The flat was just a stone's throw from Highgate tube station. Judging from the length of the escalators one was required to ride before finally attaining ground level, this station must be one of the deepest in London. When the escalators at Highgate station broke down, as they did with tiresome regularity, passengers were advised to alight elsewhere, presumably to avoid the heart attacks risked through the attempt to climb the station's Everest-like emergency stairs. Highgate station had the additional disadvantage of being on the Northern Line, known at that time as the "Misery Line" because of its ancient rolling stock and the lengthy delays to which its passengers were customarily subjected. I thought that, following Bertrand Russell, a warning should be posted at Misery Line stations to the effect that only passengers of sufficient longevity should expect to reach their destinations still breathing.

In the immediate vicinity of the station was a cluster of shops and small businesses. George and I used occasionally to take breakfast at Alf's Café, where it was not so much chips, but grease, with everything. Thus, for example, the "Big Three"—sausage, egg and chips—became the "Big Four", that is, the Big Three plus a pool of grease. But the portions were generous, and the accompanying mug of tea big enough to drown in. We also became friendly with the local newsagent, a vivacious Yugoslav lady called Joan Christian, with whom we would have heated debates about socialism and communism.

In July 1969, as everyone knows, the first American moon landings took place. George and I acquired a television from somewhere, set it up in my room and invited a bunch of people over to watch the broadcast of the proceedings. A number of our guests, being left-wing Latin Americans George had met in Poland, had little reason to applaud any *Gringo* undertaking, but even their reservations melted away in the technoromantic appeal of the happening. The providential clearness of the night allowed the full moon to shine in all its glory through the balcony windows, so enabling a unique synchronicity to be established with the lunar image on the television screen. A festive mood prevailed. When Neil Armstrong opened the door of the module capsule, poised to set foot on the moon's surface, I couldn't help piping up, in a spirit of irreverence, with "Peanuts, popcorn?" as if to a movie audience. Nobody laughed. As Armstrong uttered his historic words (which at first I thought I'd misheard) "A small step for man, a giant leap for Mankind", my mind flashed back to the story I had written while at school in which the spaceship is engulfed by lunar dust. How wrong I had been

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in my speculations. The lunar surface was solid as rock, in fact was rock! When the astronauts proceeded to engage in what NASA termed, risibly, “extra-vehicular activity”—that is, in this case, began to move around on the lunar surface—I was struck by the fluidity of motion permitted by the low gravity. How far the real thing surpassed the special effects which had impressed me in the movie *2001: A Space Odyssey!* Bathos supervened when President Nixon, old “Slippery Dick” himself—whom we all loathed—appeared onscreen to communicate some platitudes to the astronauts. (“Mars next, boys!” I seem to recall him saying. Or is that remark attributable to the unspeakable Spiro T. Agnew, Nixon’s vice-President, of “nattering nabobs of negativism” fame?) But the tension mounted again when communication with the astronauts ceased during the few minutes following the lunar module’s takeoff in its effort to rejoin the orbiting spacecraft. The feeling of relief was palpable when it was announced that the rendezvous had been successful. The astronauts safely on their way back to earth, we called it a night.

While at Talbot Road George began to experience persistent abdominal pain. As an undergraduate I had myself been subject to chronic stomach discomfort, but the college doctor had dismissed my complaint as “nervous dyspepsia”, prescribing belladonna pills as a palliative. After a time my pain vanished, never to return. In an ill-advised effort at reassurance I suggested to George that his malady might be that same nervous dyspepsia. As it turned out, my amateur “diagnosis” could not have been wider of the mark. George consulted a number of doctors, none of whom got to the bottom of the matter. Finally his trouble was identified as Hodgkin’s disease, for which he underwent chemotherapy. This caused him much suffering, but it was, happily, successful in inducing a remission from the illness.

George had been offered a research fellowship at the University of Sheffield from October for the 1969-70 academic year. Coincidentally, Jumbo was due to leave Sheffield to take up a lectureship at Chelsea College, so it was natural that he take George’s place at Talbot Road. At the end of the summer Jumbo moved in, and we quickly picked up our old jokey relationship once again. One anecdote I recall from that time arose in connection with *Batty and Stevens*, a firm of estate agents whose signs were to be seen throughout the neighbourhood. I never tired of pointing out to Jumbo that “you’d have to be *Batty* to go into partnership with *Stevens*.” I could scarcely believe my luck when one morning we found that the signs had been changed to *Batty, Stevens and Good*, so enabling me to announce that “apparently, you’d have to be *Good* and *Batty* to go into partnership with *Stevens*!” Life rarely offers such golden opportunities.

Jumbo’s installation at Talbot Road was, as it happened, most timely. For Mrs. Clifford—still exercised by the appalling state to which her kitchen had been reduced, to say nothing of the cavalier treatment

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of her furniture—was bent on replacing us with tenants more to her liking. Early one morning we were woken by a hammering on the front door. It was Mr. Blumenfeld, who announced that Mrs. Clifford's patience was at an end and that she wanted us out. After Blumenfeld left I put it to Jumbo that he might be able to persuade Mrs. Clifford to reverse her decision: she would surely view him, a graduate of both Oxford *and* Cambridge, as a paragon of respectability, someone whom she could trust to serve as a moderating influence on the remaining lunatic to whom her agent had originally let the place. I cannot now recall whether Jumbo actually met with Mrs. Clifford herself, but he deployed all his considerable diplomatic skills in winning Mr. Blumenfeld over, with the result that the threat of eviction was lifted.

Michele and Spencer, who were married in the summer of 1968—a celebration I was unable to attend because of my imbroglio with Sandy—, had meanwhile moved to East London, where Spencer, having obtained his medical degree, was serving his internship at Albert Dock Hospital. This was situated close by gas and sewage works in a decayed part of London's dockland; and the quarters Spencer and Michele had been assigned near the hospital grounds were correspondingly dingy. The walls of the place were so saturated with the remains of the numerous curries prepared by the previous occupants that it seemed a full meal might be obtained merely by direct scraping onto one's plate—"wall bhuna", no less. With her usual optimism, Michele made light of these somewhat dispiriting conditions, and proceeded to scrub the walls until they were several shades lighter and the odour of curry, while not wholly obliterated, had been reduced to an tolerable level. Not long after Michele and Spencer's move to Albert Dock, their first child, and my godson, Gabriel, was born.

Brian Priestley had also migrated to the Smoke, taking up a day job at Dillon's bookshop on Malet Street. Not only had he landed a regular gig tickling the ivories at Kettner's restaurant in Soho, his unmistakable voice could now even be heard on the air, since he'd become the co-host of the Radio London program *All that Jazz*, which featured regular interviews with jazz musicians. Brian was unrestrained in his scorn of his co-presenter, a fellow with the unlikely monicker of Don Dive. According to Brian, Mr. Dive's interviewing technique consisted mainly of the posing of inane questions such as "Do you come from a musical family?" I speculated that, by contrast, an interview with Brian at the helm might go something like this:

Jazzman (expansively): *Well, I was born on the wrong side of the tracks in Lynchtown, Alabama, way back in 1925. And times was hard then, man.*

Brian (with scholarly impatience): *Yes, yes, that's all very interesting. But what I really wanted to know was the exact date of the session on which you and the other members of the Flatfoot Five waxed the version of Washtub Blues which became immortalized as Matrix Number 123581321.*

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Jazzman (bewildered): *I don't know nothing about that, man. Hell no.*

Mr. Dive soon departed, leaving Brian in sole charge of the program, whose standard rose several notches as a result. I recall my excitement when Brian phoned up one day to invite Mimi and me to join the audience at his broadcast interview with the legendary jazz pianist Bill Evans. On the occasion we saw him Evans looked grey-faced and ill, and I was struck by the puffiness of his hands, the result, I was informed, of an on-going battle with narcotics addiction. But he was impressively dignified and articulate during Brian's interview, which turned out to be exemplary, a far cry from any attempt at parody. Brian went on to become one of the most prominent British jazz critics. I have no idea what became of Don Dive.

At the centre of the London jazz scene was Ronnie Scott's club on Frith Street in Soho. I heard a number of outstanding musicians perform at "Ronnie's", among them: Dizzy Gillespie; Horace Silver; Wayne Shorter; Joe Henderson, the great tenor player whose work with McCoy Tyner on the album "The Real McCoy" had so impressed me, and whose business-like appearance somehow complemented the electrifying sounds he laid down; the wild blind reed virtuoso Roland Kirk, whose gimmick it was to play three instruments simultaneously, and who I recall attempted to heave one of the patrons over the bar. The heights were reached on the several occasions I heard Gary Burton. His appearances were usually billed as the Gary Burton Quartet—the first with Larry Coryell, Steve Swallow and Larry Bunker, the second with Jerry Hahn, Swallow, and Roy Haynes. But on one memorable occasion he showed up by himself. A couple of Ronnie's excellent house sidemen accompanied him in his first set. Then, not far into the second set he dismissed them—whether by prior arrangement or spontaneously I could not tell—and proceeded to play the remainder of the set solo. Along with the rest of the audience, I could not believe my ears, or indeed, my eyes, at what then ensued. The impact of Burton's playing in such intimate surroundings was overwhelming: I have never had another live musical experience of comparable intensity. We all wanted him to continue to play indefinitely¹. There is an approximation to the musical experience of that night on his later solo album, *Alone at Last*.

Ronnie Scott, the owner-manager of the club, was an accomplished tenor saxophonist himself, and would on occasion lead his own group. He had become popular for his spiels as master of ceremonies, in the

¹ Musicians are the true magicians, and thank God for them! But according to Plato, music leads one astray, and André Breton dismisses music as an "art of pure sensation"; I have occasionally heard from the lips of my own colleagues, that music is "distracting". I would ask, from what does it lead us astray, or distract us? The business of pursuing pure philosophy, or pure mathematics, or pure...business?

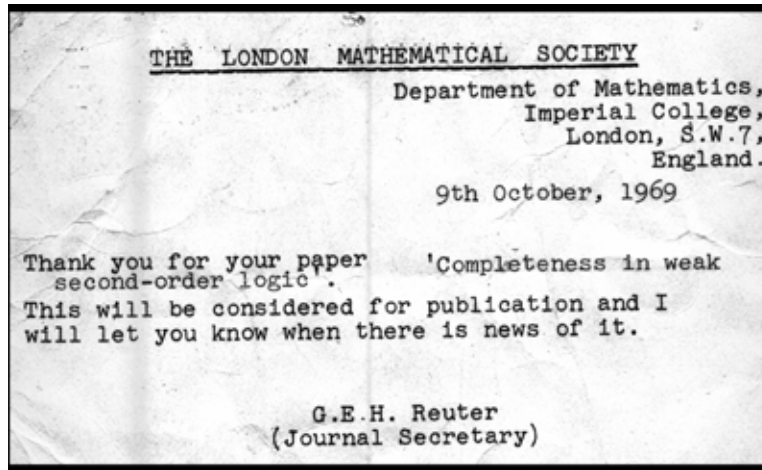
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course of which he would invariably trot out the same jokes, relying, in something like the world-weary manner of Jack Benny, on his impeccable sense of timing to make them fly. No soiree at Ronnie's could be considered complete without his launching into his "Miles" routine... "I've got all kinds of attractions lined up...for next week, I've booked Miles (pause)... Bernard Miles." And, on evenings when business was slow, he would observe lugubriously: "The bouncers are working overtime tonight—throwing the customers *in*."

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In my eagerness to get out of Oxford, I had departed before completing my D.Phil. dissertation, which left the pressing matter of writing it up. This I did soon after my move to Talbot Road, submitting in May 1969. Months went by before I was summoned for the oral by the examiners, who I had already learned were to be Michael Dummett and John Shepherdson. In the meantime I had discovered an error in the proof of one of my theorems, an error quite unnoticed by my examiners. I brought it to their attention at the examination, and devoted the greater part of my oral efforts to showing how the result could be patched up. While they didn't seem particularly impressed by all this, they informed me that I had passed the examination. I was somewhat disappointed, however, that my thesis failed to win the Oxford Senior Mathematical Prize. Another disappointment was the fact, already mentioned, that the principal result of my thesis, a completeness theorem for weak second-order logic which I had obtained more than a year before, had been formulated and proved independently at about the same time by Lopez-Escobar and had just appeared in print. Despite the fact that my proof was quite different from Lopez-Escobar's (employing algebraic as opposed to proof-theoretic methods), my presentation of the theorem was rejected both by the *Journal of Symbolic Logic* and *Fundamenta Mathematicae* on the admittedly reasonable grounds that the result was already known. As a last resort I sent my paper to the *Proceedings of the London Mathematical Society*. In response I received the following card:

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That was 34 years ago. Like the protagonist of Kafka's *Great Wall of China*, I still await news!

In 1969 the eminent logicians Leon Henkin and Andrzej Mostowski were visiting fellows at All Souls College and I had the privilege of meeting both of them. Henkin was a droll man, very indulgent to his two young sons, who clearly didn't take him very seriously. Mostowski combined old-world graciousness with wit and warmth in a most appealing way. Finding the atmosphere at All Souls somewhat too hermetic for his liking, especially given his anxiety concerning the current political situation in Poland, he cut his visit to Oxford short. At a pleasant lunch with Jane Bridge and her family to which both Mostowski and I had been invited, I remember him pointing out with evident amusement that his name and that of his hosts were cognates: in Polish "most" means "bridge", and so his name could be translated "Bridgeson".

In the summer of 1970 I attended the conference in mathematical logic held at Bedford College in London. Among the participants were Sol Feferman, Haim Gaifman, Angus Macintyre, Jeff Paris, Hartley Rogers, C.C. Chang, H.J. Keisler, Peter Aczel, Max Dickmann, Yoshindo Suzuki and Alan Slomson. My contribution to the proceedings was a brief account of a paper I had coauthored with Jumbo, *An effective implication in functional analysis*¹. As I gave my talk I wondered who the distinguished-looking elderly gentleman in the audience might be. On enquiring I was informed that he was none other than Arend Heyting, a founding father of intuitionism. At that time I knew next to nothing about intuitionistic mathematics, but I now surmise that the reason for

¹ Later published as *On the Relationship between the Boolean Prime Ideal Theorem and Two Principles of Functional Analysis*, Bull. De l'Acad. Pol. Des Sci., XIX, No.3, 1971

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Heyting's attendance at my talk may have been the presence of the word "effective" in its title. If that was indeed the reason, then Heyting must have been disappointed, for by "effective" I meant merely the eschewing the use of the axiom of choice—a far cry from its intuitionistic meaning. After my talk one of the participants, the brilliant set-theorist Robert Solovay, came up to me and rapidly outlined another method of proving our result. This is the sole occasion on which I met Solovay, but the sheer speed of his thinking left an indelible impression.

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The year 1968 retains great significance for the Left. For many of the young, myself included, it was a time of political awakening, the moment at which questioning the established order was transformed into active protest against it—given the *Zeitgeist*, not necessarily in that sequence! It was in France during May-June 1968 that the newly radicalized younger generation came closest to unseating the establishment. What happened there demonstrated the possibility, at least, of achieving that elusive goal, revolution in advanced capitalist countries—a goal which now in this prime (but only numerically) year 2003 has never seemed so impossible of realization. The events in France in 1968 brought the country to a revolutionary crisis. Starting with a student insurrection on one campus, the revolutionary fervour quickly spread to all tertiary and secondary students, in the process surprisingly drawing in the working class, and culminating in a ten-million-strong general strike which brought the French government to the point of collapse. The country teetered on the very brink of revolution, and but for the inhibiting role played by the Communist Party and the trade union leadership, revolution might well have come about.

During the year opposition to the Vietnam war had begun to mount, not only in the United States, but throughout Western Europe. March 1968 had already seen a huge demonstration in London and a second was planned for the last weekend in October. In Britain the protest was directed not just at the US government, but equally at the British Labour government under Harold Wilson which sided unequivocally with the Americans. It seems likely that it was only the strength of protest that deterred Wilson from sending British troops to Vietnam to support their American "allies".

Having long acted as a magnet for the politically motivated, LSE naturally came to serve as the organizational centre of British student protest against the establishment in general, and the Vietnam war in particular. When I appeared at LSE in October 1968 I was immediately caught up in the political atmosphere—the spirit of revolt was quite intoxicating. Like 1967 San Francisco, it was all exhilaratingly different

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from Oxford. The political pot came to a boil right away with the occupation by LSE students of the School buildings over the weekend of the October anti-Vietnam war demonstration. In an attempt to forestall the occupation, the School's Director, Walter Adams, officially declared the institution closed, issuing a warning to students and staff members that participation in the occupation would constitute trespass and could lead to expulsion or sacking. Despite this threat, a number of staff members, including myself, became actively involved in the occupation¹. Over that weekend the place was transformed into a kind of political laboratory with American-style teach-ins and nonstop heated discussion of revolutionary strategy. Rumours that the police were on their way continually circulated: on hearing one such rumour which seemed to have some foundation, my sense of self-preservation momentarily overcame my revolutionary resolve: I am ashamed to admit that I hastily made myself scarce, returning only when I failed to see any sign of the boys in blue. A number of French students, veterans of May '68, and so heroes in our eyes, showed up to instruct us in the craft of poster production, converting the student canteen (the Refectory) into a veritable poster factory. George Wilmers and I enthusiastically churned out a raft of flyposters showing the time and place of the demo. For good measure, we threw in inflammatory slogans such as "The Struggle Begins" and "Down with Imperialism!". At the crack of dawn of the day of the demo, the two of us piled into George's little Ford Anglia and chugged around East London, stopping here and there to affix our amateurish productions to a succession of crumbling walls. As George was doing the driving (necessarily, since a number of years would elapse before I would even attempt the driving test), the actual affixing was largely my responsibility. In my anxiety to avoid being nabbed by the police for illegal flyposting I performed this operation as quickly as I could, in the process covering myself with glue and rubbing my hands raw.

The demonstration itself, which attracted upwards of 100,000, was the first really large political manifestation in which I took part. It was a stimulating experience. One of the banners, I recall, proclaimed "We are all foreign scum", mocking the infamous description of the demonstrators by a reactionary Tory MP as "scum from abroad". At the rally in Trafalgar Square Tariq Ali (a contemporary of mine at Exeter College whom I knew only by sight) addressed the assembly. I was impressed.

Four days after the occupation LSE's Court of Governors issued a public statement, which contained the following ominous passage:

¹ A detailed account of the occupation and of the subsequent "Gates" episode (see below) is given in *LSE: The Natives are Restless*, by Paul Hoch and Vic Schoenbach (Sheed and Ward, 1969).

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... We have considered the position of certain junior members of the staff who are alleged to have encouraged and participated in the unauthorized occupation. On this occasion, having regard to the immaturity of those concerned, we take the view that the process whereby staff in clear breach of contract can be dismissed need not be invoked. But we declare that any future attempt on the part of members of staff, senior or junior, to encourage or participate in action on the part of students likely to endanger the integrity and orderly conduct of the School could be regarded as misconduct warranting the termination of contract.

This was typical of the menacing pronouncements coming down from the LSE authorities at that time.

The prolonged struggle between radical students and authority at LSE came to a head on the night of 24 January 1969 with the notorious “Gates” episode. In this heady, if doomed, effort at re-enacting the storming of the Bastille, a substantial group of students, supported by majority vote of the LSE Students’ Union, proceeded to dismantle a number of internal security gates which had been installed, quite provocatively, by the LSE authorities. A number of senior academics ascribed these gates such importance as symbols of authority as to defend them bodily against attack, actually grappling with the students bent on their removal. Since the “unauthorised” October occupation, a widespread rumour had emerged that the LSE authorities were seeking to close the School so as to weed out the troublemakers. Certainly the “Gates” affair provided the ideal pretext for shutting the place down. And that is exactly what Adams did, enlisting the aid of hundreds of policemen in sealing all three LSE buildings later that evening. In a shameful subsequent episode, members of the LSE staff who had witnessed the affair were encouraged to finger any participants as could be identified as they filed out of the building, flanked by policemen. (Apparently this led to just three arrests.)

During the ensuing lockout, which lasted a number of weeks, LSE staff and students underwent a kind of local diaspora, migrating to other London University colleges for classes and lectures. Along with the fellow-members of our minuscule mathematics department, I found myself chalking the blackboards at Birkbeck College—an irony I did not fail to note since I had once been turned down for a position there.

Everyone knew that the authorities were bent on making an example of the perpetrators of the “Gates” affair—at least those who could actually be identified—and rumour had it that a number of “kangaroo courts” were to be held for the purpose of legitimating the expulsions that would inevitably take place. Those who were to be “tried” included two lecturers, Nick Bateson in Psychology and Robin Blackburn in Sociology. Neither were accused of involvement in the actual destruction of the gates themselves—Bateson had, it seemed, merely “encouraged” the students to dismantle the gates, and Robin Blackburn’s “crime” amounted to no more than publicly approving

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removal of the gates *after* the fact. Obviously the whole idea of targeting these two was to put the fear of God, i.e., of the LSE authorities, into the rest of us. Bateson and Blackburn were both fired.

Almost as soon as the School reopened the sackings became public knowledge. The students immediately declared a strike, picketing classes and lectures, and in some cases, disrupting them. “Free, Free LSE! Take it from the bourgeoisie!” became a familiar refrain. A squad of the more students marched into the School’s Senior Common Room and proceeded to harangue the academics with a loud-hailer. When this threatened to become a daily occurrence, the senior staff members responded by attempting to turn their *sanctum sanctorum* into a fortress. Although I rarely ventured into the SCR, finding the atmosphere there somewhat stuffy, I was, as a member of staff, entitled to do so. When, just for the hell of it, I attempted to exercise my right of entry, I was immediately challenged by an officious senior member of staff with a shrill “You can’t come in, you’re a student!” My long hair, tielessness, and generally scruffy appearance made such (mis)identification natural, but the fact that I had been challenged at all provided sad evidence of the width of the gulf that had opened up between the students and their teachers. Word later came that a group of militant students—“academic thugs”, as they were identified in the Press—had committed the ultimate sacrilege of removing the portrait of Lord Robbins, the Chairman of LSE’s Court of Governors, which occupied pride of place in the Common Room.

A group of staff members opposed to the sackings issued the following statement, which I seem to recall signing:

The undersigned members of the staff of the London School of Economics believe that the dismissal of university teachers for the expression of their opinions alone is a breach of academic freedom; that such action on the part of School authorities is detrimental to the life of the School as an academic institution that makes impossible any solution to the School’s problems. We believe that it is essential for the future of the School that this action be reversed.

The sole effect of this declaration was to increase the apprehension on the part of its signatories that they might themselves suffer Bateson’s and Blackburn’s fate.

It happened that one of my first-year students, Brian Gallen, had become entangled in this affair. The inflammatory political atmosphere at LSE had quickly transformed him into a firebrand, as witnessed by the newspaper photo bedecking the front cover of Hoch and Schoenbach’s book¹ which shows Brian at the School’s entrance at the start of the October occupation, arm raised high, beckoning other students to join the fun. He came up for “trial” by the LSE authorities—

¹ See previous footnote.

I cannot now recall whether it was through participation in the “Gates” episode, or whether he had been involved in the later disruption of lectures. He naturally asked me, as his tutor, to write a letter in his support. Although I was inclined to regard the “Gates” business itself as an instance of left-wing infantilism, I felt sufficient solidarity with (and, I confess, a twinge of envy for) courageous defiers of authority such as Brian to agree to provide such a letter. I envisaged that in my letter I would argue, on purely academic grounds (Brian being after all an able student) against his expulsion and at the same time—summoning up an guile which was in truth quite beyond my slender diplomatic capacities—attempt to avoid actual endorsement of his actions. Given what had befallen Bateson and Blackburn, I was uncomfortably aware that donning the academic mantle might not serve to shield me from being tarred with guilt by association. This was, in fact, precisely what Cyril Offord said to me when he learned that I was offering Brian my support. But Offord didn’t suggest that I withdraw that support. Indeed, he took a dim view of the heavy-handed way in which the LSE authorities were attempting to deal with the situation. In any event my offer stood, and I actually drafted the letter. Fortunately for me, Brian decided to withdraw from LSE before his hearing was due to take place. I later heard that he had become the manager of a rock group.

At the time I joined it, the LSE Mathematics Department was not, strictly speaking, a separate entity, but an offshoot of the well-established Department of Statistics. There were just four of us mathematicians: the elderly Professor, Cyril Offord, a prominent analyst and an FRS; Haya Freedman, an algebraist; and the two recent appointees, Dick Hornblower, another analyst, and myself, unquestionably in need of one. Dick and I had been assigned a shabby office on the ground floor of the Dickensian building in Clare Market that LSE was then using to accommodate its influx of new staff. We were both amused to see “Mr. Bell and Mr. Hornblower” painted on our office door: juxtaposed in this way, our names naturally evoked swabbed decks, rigging, and walking the plank. The building itself boasted a porter tucked away in a tiny office of his own complete with coal fire. Among that worthy’s duties was tugging on the ropes (whose exact function still escapes me) of the antique lift that conveyed the occupants of the upper floors—chiefly employees of obscure legal firms—precariously to and from their places of employment. It all seemed straight out of *Bleak House*. Dick and I soon found sharing a room irksome, so I decamped to a minute unoccupied office nearby. This cubbyhole was even smaller than my Ovington Square broom closet—indeed could barely accommodate a desk and chair—but it did provide privacy.

As a newly appointed Assistant Lecturer in Mathematics, I had been charged with teaching a portion of the portmanteau course Real

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Variable, Analysis and Mathematical Methods. I chose Analysis, interpreting it as my beloved General Topology. Lacking experience in lecturing to undergraduates, I mistakenly adopted a Bourbakoid approach, starting my course with a number of arid definitions. Not surprisingly, my audience was completely mystified. At the end of my first lecture a squad of the class's more demonstrative members pinned me against the blackboard and demanded an explanation. I proposed that we repair to the pub, where enlightenment could, I felt sure, be attained through the consumption of sufficient quantities of beer. This is how I got to know the members of my first undergraduate class.

Soon after I arrived at LSE I was contacted by a reporter from the *Daily Telegraph* in connection with an article on ex-prodigies she was writing for their colour magazine. She was interested in finding out what I was doing now and whether I had fulfilled my early promise, and proposed an interview. In an access of modesty I now regret, I told her that, rather than bothering with me, she should seek out *echt*-prodigies such as Jascha Heifetz or Yehudi Menuhin. How little I then cared about my past!

In the late 1960s a number of curious and interesting characters were swept in by the LSE vortex. One such was Marty Siegel, an intense pale slender red-haired fortyish New Yorker. He could be found in the Refectory at all hours of day or night scribbling away at a mysterious manuscript. I can't recall exactly how I got to know him, but anyone within close range of this singular fellow ran the risk of having both ears bent by his lurid political prognostications. His favourite theme was the Nixon administration's intent to re-establish Nazism in the USA: I can still recall him telling me, in his strong Brooklyn accent, "Do you *realize* that they're setting up *concentration camps* in Central Park at this *very moment*?" He told me that he was an ex-mathematician, having once been (so he claimed) a graduate student in algebraic geometry at Columbia. And indeed he did have a fragmentary knowledge of advanced mathematics, a familiarity with mathematical terms such as manifold and sheaf and mathematicians' names such as Eilenberg, Serre, Grothendieck. So emerged a curious kind of comradeship between us, which culminated in his handing me one day a typescript of what proved to be his youthful reminiscences. Finally I had found out what he was continually scribbling away at! I read through the manuscript, but retain only a vague recollection of its contents: the story of a nice Jewish boy from the Lower East Side, the apple of his mother's eye, an aspiring mathematician, graduate student at Columbia, dropping out...etc. etc. Except for the last part, I wasn't sure how much was invention—not that it mattered! It was never clear what Marty's current occupation (if any) actually was. He claimed to be a political essayist for an underground newspaper he identified as "Red Rat", as well as the manager of a ballet troupe. But Marty's status as an ex-mathematician was confirmed when one day he introduced me to a

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friend of his, a bona-fide mathematician at New York University, who said that he and Marty had been fellow students at graduate school. Marty hung around LSE for a couple of years, and then dropped from view.

Of all the oddballs I met at LSE, the oddest and most memorable was Richard B. Beall—"Dick" to his friends, hence "Big Deal", in my affectionate near-Spoonerism—a hard-drinking American in his late thirties pursuing a part-time Ph.D. in operational research. He was a spontaneous, sprawling character with whom I hit it off instantly. He had acquired a reputation among the students for his largesse in standing everybody rounds of beer in the LSE bar, and I was doubtless on the receiving end of his generosity at our first meeting. By my impecunious British standards, Dick earned a vast salary, enabling him to house his family in Thames Ditton, a posh suburb in the stockbroker's belt south of London. With his crewcut, grey suit and clip-on tie, he appeared every inch the American executive he in fact was—employed in some capacity by a company affiliated to NATO (for me an irony: see below). But it soon became clear that behind Dick's grey flannel suit lurked a soul whose unconventionality exceeded even that of the bearded (in my case unbearded) freaks for whom he often stood drinks. Who else but Dick would build a treehouse for his children and, goaded by their lack of interest in the thing, perch in it himself in his pajamas swigging away at a whisky bottle, to the consternation of his staid neighbours? And no one but Dick could have had the delightful notion—of a truly American wackiness—of naming his son Richard B. Beall IV, jumping two generations so as to achieve additional class. Dick came to regard me as a kind of honorary younger brother. He was delighted when I passed my D. Phil. oral examination in 1969, and threw a celebratory party—at which the two of us got thoroughly smashed. Dick suffered from manic depression and in his youth had, so he told me, been subject to delusions. As a 19-year-old in Illinois he had become convinced he was God, upon which his alarmed parents quickly committed him to a mental institution. But somehow he later managed to make good. Dick was fascinated by the sinister and remarkably persuasive creed of Scientology and tried to convince his research supervisor Frank Land that an analysis of its "operational effectiveness" in having successfully converted whole swathes of American corporate executives to its creed might constitute a suitable thesis topic. Knowing Dick, I felt that this was a case of "there but for the grace of God went he," and so I wasn't surprised when Frank demurred. But I was startled when Dick then asked me if I would be willing to take him on. I declined, for, close as I had come to feel to Dick, the idea of acting as his supervisor was simply too bizarre. Also I had already attempted to read through some of his drafts, offering, at his insistence, suggestions for improving his style. My heart had sunk when he presented me with his "finished" typescript, a jungle

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of prose through which, I would, as a friend, have to hack my way. But, in that very spirit of friendship, I buckled down to the task, ruthlessly expunging what I regarded as barbarisms and extirpating whole thickets of redundancy: I recall scoring through a complete paragraph of Dick's jargon and replacing it by the phrase "such that". Dick's long-suffering Belgian wife Yvonne, with whom I also became friends, had stood by him for many years, but by 1971 relations between the two had become sufficiently strained for Dick to move in temporarily with us at our Finsbury Park flat, before he departed to take up a new job in Texas. That was the last I saw of Dick. A few years later I was saddened to learn from Yvonne that he had died of a heart attack. He was a dear, unique, uninventable man, and I sorely miss him.

Imre Lakatos, my original LSE contact, was one of the most colourful members of the LSE "staff". Trained originally in mathematics, he had been an active member of the Hungarian communist underground during the war. Later he rose to a prominent position in the Hungarian Ministry of Education, only to be purged, as were many sincere communists, in the early 1950s. He escaped to the West during the 1956 uprising, took a second Ph.D. at Cambridge, and joined the LSE philosophy department, where Karl Popper—the great philosopher of science who had become Lakatos's idol after his disillusionment with communism—still taught. (Popper, whom I met on a number of occasions, retired from LSE in 1969, so the two of us were, technically at least, colleagues for a year.) Lakatos's academic fame rested on *Proofs and Refutations*, the published version of his Cambridge thesis. In this undeniably brilliant, polemical work, the tangled history of the development of Euler's polyhedron formula $V - E + F = 2$ is dissected with infectious verve. The text bears witness to the continuing influence on Lakatos of the Marxist dialectics of his youth—a fact causing some embarrassment to the work's conservative editors when it was finally published in book form in 1976, two years after its author's death. But by the time I met Lakatos he had become a model reactionary, an "inverted Stalinist" in Moshé Machover's apt phrase. Imre was shrill in his support for U.S. policy, in Vietnam and, indeed, everywhere else; he identified the Soviet Union as an evil empire long before Ronald Reagan popularized the phrase. I felt fortunate that I was not a member of his department, since, had I been, our widely divergent political views might have sparked off something more serious than the mere verbal sparring we happily, and harmlessly, engaged in.

Early in 1971 I became involved, as I will describe, in organizing the Bertrand Russell Memorial Logic Conference, which had been conceived chiefly as a protest against the continuing NATO sponsorship of international logic conferences. Given Imre's enthusiastic support of everything NATO stood for, I expected him to forbid the students in his department to attend the meeting. To my surprise, however, he issued no such interdict, and three of his students actually did participate.

Imre's volatility, capacity for dramatization, and massive, yet curiously vulnerable ego were all reminiscent of the stage Hungarian, as if straight out of a Molnar play. Imre was known for the sharpness of his wit, an attribute to which I can testify when I recall the occasion on which he had invited Michael Dummett to speak at his seminar. Before Dummett's lecture Imre and I had been going at it, as usual, hammer and tongs: somehow the subject turned to the Soviet authorities' recent incarceration of political dissidents in psychiatric wards, a repellent policy with which Imre seemed to associate all "leftists" such as myself and "liberals" such as Dummett. Imre was still gnawing away at this bone of contention as we entered the lecture hall. Soon after the start of Dummett's lecture, Imre excitedly scribbled a note and passed it to me. It read : "The political views of people like you and Dummett will eventually land both of you in a psychiatric ward." Quickly I scrawled back: "If so, you'll be there with us." Imre topped this with: "Yes, but I'll be the warden!"

Clausewitz, famously, defined war as "the continuation of politics by other means". For Imre, this phrase served to define philosophy, or his brand of it, at least. He was still sufficiently Marxist to cleave to the view that "the philosophers have interpreted the world—the point is to change it", even if the world he was now bent on changing had shrunk to no more than the arena of professional philosophy. He fought an unceasing battle against the Oxford philosophical tradition, which he saw as both ingrown and effete, and whose domination of the British academic scene he thoroughly resented. (I took it that he forgave me my attendance at that antique institution on the grounds that I was a mathematician, not a philosopher.) Imre's combative nature caused him to fall out even with his allies. In an unparalleled act of apostasy, he provoked a schism in the Popperian "church" by rejecting his mentor's doctrine of pure refutationism, and substituting his own "methodology of scientific research programmes". Master and ex-disciple hurled anathemas at each other virtually until the day of Imre's death. Paul Feyerabend, the prominent philosopher of science and, latterly, controversialist, was another former ally of Imre's who showed up at LSE now and then. When Feyerabend came to advocate his notorious "anything goes" attitude toward science (which struck me as a pose, a way of cocking a snook at the academic establishment—a bit of a lark in fact), Imre took up the cudgels in defense of scientific responsibility, denouncing Feyerabend's anarchism as an outrageous dereliction of intellectual duty.

But Imre himself had an irresponsible streak, which sometimes got him into trouble. I well recall the occasion on which Andrzej Mostowski, then visiting Oxford, came to speak at Imre's seminar. We had all been invited to dinner afterwards by Moshé Machover. On the way over Imre treated us to a somewhat boastful account of how, when the curtains in his flat caught fire, he had managed to stop the blaze by pulling them

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down with his fingers, suffering, amazingly, no ill effects. I observed that either this was a miracle or he had asbestos fingertips, which amused everyone except Imre, who rarely appreciated other people's humour. Later, at dinner, Mostowski mentioned his concern about mounting an effective defense for a number of his students who, as political dissidents, had run into difficulties with the Polish regime. He then asked Imre what he would do in similar circumstances. Imre responded flippantly that they would simply have to sink or swim—it was no responsibility of his. Shocked by this reply, Mostowski told Imre that he regarded his attitude as nothing short of irresponsible. The evening ended on a somewhat sour note. Before this contretemps Imre had sung Mostowski's praises without cease; I noted that, a few days later, he had changed his tune completely.

Imre's communist past naturally made him an object of suspicion in the eyes of the British political authorities. Indeed, rumour had it that, despite his fervent disavowal of Marxism, he never succeeded in acquiring British nationality. In this connection I recall entering his office one day and spotting an unopened parcel on his desk addressed to "Sir Imre Lakatos". Pointing at it, I remarked, "Wishful thinking, eh?" His reply: "Yes, now they're confusing me with Sir Karl!"— Popper having been knighted in the 60s.

Imre ran his department along the lines of a Renaissance studio, with a touch of Hollywood. Responsibility for the grand design was his alone, leaving minor details to be filled in at his direction by his apprentices—that is, his graduate students. When Mike Hallett, whose reputation in the philosophy department had been secured by obtaining the top First of his year, expressed the wish to study the philosophical foundations of set theory under my supervision (poor fellow!) Imre raised two objections: that mathematics was generally much too difficult for philosophers, and that in any case he, Imre, had already assigned Mike his niche in the grand scheme of the methodology of scientific research programmes (I can no longer recall what that niche was). In the end I convinced Imre that Mike's mathematical talents were more than adequate to meet his first objection. But Imre refused to give way entirely on the second, insisting that Mike find a way of fitting his work into the grand design.

Imre had fought hard to achieve his position, and could be very aggressive in its defense, as is shown by the following episode. My student Graham Priest had expressed the desire to awarded his Ph.D. in philosophy, rather than in mathematics, as would normally have been the case in my department. I told him that I'd look into the matter, suggesting that a compromise solution might be to call it "philosophy of mathematics." Somehow Imre got wind of my enquiries into the feasibility of this proposal, and as a result I was treated to a midnight phone call from the great man, in which he spluttered, with his Bela Lugosi accent, "I am ze philosopher of ze mathematics at ze LSE and

you have no status in awarding degrees in philosophy.” So Graham had to be content with a doctorate in mathematics.

It was through Imre—as editor-in-chief of the *British Journal for the Philosophy of Science*—that I came to write my first book review, of S.W.P. Steen’s *Mathematical Logic: with Special Reference to the Natural Numbers*. Steen had acquired a legendary reputation amongst Cambridge mathematics undergraduates for the impenetrable obscurity of his lectures. Although I had never been exposed to these myself, I had seen the arcane examination questions, expressed in his own peculiar notation, it was his habit to set in Part III of the Cambridge Mathematics Tripos. These would typically assume the form: *Show that* $\exists \eta d^{\epsilon} \Upsilon \in L\mathfrak{S}$. While at Cambridge Imre had attended Steen’s lectures, and the experience still rankled. He required from me less a review of Steen’s book than a demolition job. Although I could not disagree with Imre that Steen’s tome, of some 640 dense pages, was hardly a masterpiece of exposition, I was unwilling to assume the role of hatchet man, and so I turned in a brief neutral review à la *Mathematical Reviews*. Predictably, Imre was most unhappy with my effort, claiming that it was too short, by which I knew he meant that it was insufficiently critical. So I returned to the drawing board and produced a piece peppered with sufficient references to the book’s shortcomings (which were, truth to tell, all too easy to find) to satisfy my editor. I vowed that in future I would review only books that I could praise without reserve, a promise I have kept.

The rift between Imre and Karl Popper was underlined in an amusing way. After Imre’s death Mike Hallett was commissioned to catalogue his extensive collection of philosophical books, which his partner Gillian (?) had bequeathed to the LSE library. This involved Mike’s making a number of trips to Imre’s Hampstead flat, where the books were assembled on shelves stretching from floor to ceiling. These shelves were supported by uprights, a number of which had been camouflaged to resemble the spines of books. According to Mike, the section devoted to Popper contained a support bearing the title *The Open Society, by One of Its Enemies*.

Imre died suddenly in 1974, at the early age of 51. With his passing the colour faded out of the LSE philosophy department.

While my relations with my LSE colleagues were, on the whole, harmonious, it was from among the graduate students that I drew my closest friends: Gregory and Melina Serafetinides, whose warmth and boundless hospitality led to many uproarious and delicious dinners at their well-appointed flat in South Square; Peter Clark, whose unusual height and thinness led me to nickname him the “One-Dimensional Man”; Graham Priest and John Lake—my first Ph.D. students in mathematics—whose long hair and beards gained them the appellation of the “two Jesuses”; Ross Skelton, a sardonic Irishman then studying philosophy at University College; Mike Hallett, of all my students the

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one to whom I came to feel closest; Denis Gloess, a handsome young Frenchman whose “temporary” billeting with us between landladies stretched to three mirth-filled months; and my Italian student Marco Santambrogio, through whom I came to learn of the glories of Tuscany.

In the summer of 1970 Mimi and I stayed with Ross Skelton and his family at their farmhouse in County Antrim. This was situated near a hamlet called something like Ballycronanmoor; I’m sure the “Bally” is right because every other village in Antrim is called Ballysomething. That part of Northern Ireland is quite beautiful, lushly green, but also notorious for its overcast skies and incessant drizzle. After a week or so we began to crave even a scintilla of blue. While we were there we made a number of pilgrimages to the local shrines. On a visit to the seaport of Carrickfergus Ross pointed out the place, marked by the imprint of a horseshoe, where William III is supposed to have disembarked in 1690 on his way to fight and win the Battle of the Boyne. Noting that the horseshoe pointed seawards, I remarked undiplomatically that William, or his horse at any rate, must have been in a hurry to return to England.

Ross and his father, a dour gentleman, were not on the best of terms, and as a result the atmosphere at the farmhouse was somewhat tense. I fear that I inadvertently made the situation worse. Ross and his brother, Jocelyn (known as “Joss”) decided to do some digging in the garden. In a doomed attempt at showing *esprit de corps*, I picked up a spade and followed suit. After a few thrusts I heard an ominous hissing sound, and a cascade of water began to bubble up. What had I done? Mr. Skelton was furious—and I deeply embarrassed—to find that I had contrived, idiotically, to sever the underground rubber pipe that served as the water main supplying the house. Mr. Skelton didn’t express his anger by shouting or shaking his fist at me, but it could be read from his scowl and baleful silence. One evening we were invited to a party thrown by one of Mr. Skelton’s buddies. Good Irish whiskey flowed in abundance but orange squash had been laid on for those who, like Mimi and Ross’s new German wife Carla, felt uninclined to partake of the hard stuff. Strangely enough, after an hour or so the squash drinkers began to stagger about in what seemed a remarkably convincing imitation of drunkenness, quite outstripping the whiskey drinkers (including myself) in that regard. It transpired that the host had slyly spiked the squash with vodka. For all I know, it may have been a local custom to spike the ladies’ drinks, but it came as an unpleasant surprise to Mimi and Carla, both of whom became thoroughly sick.

In August 1972 Mimi and I made our first trip to Italy at the invitation of Marco Santambrogio. Thinking of this visit invariably evokes a warm glow. Yet it began inauspiciously. We first went to Paris to spend a few days at the Aquarones’ flat in the Rue Budé, which they

had placed at our disposal in their absence¹. Mimi managed to tumble down the building's stairs, sustaining some painful bruises, and I developed a cough which soon effloresced into full-blown bronchitis. It was in this parlous state that we boarded the train to Milano. We sat up all night in a crowded compartment. My racking cough caused our fellow passengers to worry that they might have been exposed to a tubercular, or worse; my attempts at reassuring them that I was suffering from nothing worse than bronchitis proved ineffectual. We were met at Milano's *stazione centrale* by Marco and his beautiful, vivacious new wife Susanna. They took us to Marco's parents' apartment, where we were treated to a delectable lunch, starting with *prosciutto e melone* and followed by pasta with olive oil, each of a delectable simplicity neither Mimi nor I had experienced before ... I still recall the wonderful feeling of uplift as we ate this delicious food in that sunlit dining room. But I was clearly ill, and so Susanna's physician brother was called in to give his opinion. He prescribed a course of antibiotics which soon got to grips with my malady.

The four of us soon moved on to Susanna's mother's villa near Parma. The weeks we spent there, in the enchanting Tuscan countryside, were truly idyllic. Meals at the villa were prepared by Susanna's mother's resident cook, and each was a superb gastronomic experience. Mimi was particularly impressed, I recall, with the handmade *minestrone* and the veal rolled in egg.

Susanna's mother had the same energy and electric sense of life as her daughter. I had regarded myself as a fast talker until I heard Susanna and her mother conversing in their native language. They spoke with such stupefying rapidity that I could scarcely believe my ears.

Marco and Susanna's love was then in its first bloom and their harmony seemed to merge with the closeness Mimi and I felt. We greatly enjoyed each other's company, and there was much lighthearted kidding around. An instance: Marco told me that fashionable Milanese had taken up the use of *di corso* for "of course", I proposed an analogous transliteration of "to hit the old sack"—*colpire il vecchio sacco*. And, for me, *il vecchio* has meant "bed" to this day. I also recall being amused by the Japanese patented "electric mosquito destroyer" with which our bedroom had been thoughtfully equipped. Attempting a Mr. Moto accent, I gleefully read out the accompanying instructions for use, adding a gloss to the effect that the device was "totally effective in

¹ There is a record of our stay at the Rue Budé in the form of a charming photograph of Mimi. She is leaning back to one side of a framed enlargement of the well-known image of the 17-year-old Rimbaud on the drawing room wall. Immediately above Mimi's head one sees a framed mirror, within which can be glimpsed a blurred image of the photographer—myself—peering through the camera. The photograph, now somewhat faded, has, as a result, a pleasantly old fashioned patina, reinforced by the sober but intricately patterned wallpaper which provides the backdrop to the tableau.

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destroying electric mosquitoes, supply of which can be ordered from company.”

Mimi and I spent the last part of our Italian junket in Florence, where we occupied a vacant apartment some friends of Marco and Susanna’s had made available for our use. Once again I was struck by the breadth of Italian hospitality. The journey to Florence had its moment of low comedy. We boarded the fast train from Milano, for which I had bought what I thought were the appropriate tickets. When the inspector checked them on the train, he shook his head and said something unintelligible (my Italian being about on the *vecchio sacco* level). I pointed to the tickets, on which *Firenze* was clearly inscribed. Equally emphatically, the man kept shaking his head. The result was that we found ourselves booted off the train at Bologna—“Bologniated”, as I came to term it. Apparently we had failed to pay some obscure supplementary charge. We completed our journey to Florence on a *treno di latte* which stopped at every station along the way.

But this *contretemps* did not prevent us from enjoying to the fullest our stay in Florence. The apartment so kindly provided by our unseen hosts was situated not far from the city centre, and quite luxurious (by our pinched British standards). I was delighted by my discovery of a pile of 1950s American magazines—*Life*, the *Saturday Evening Post* and the like. These vividly brought back my own origins. I was fascinated to see the advertisements declaring their companies’ unswerving allegiance to the American way, and, by implication, their detestation of Communism. As I turned the pages of these crumbing emblems of the past I wondered who our hosts might be. I never found out.

While in Florence Mimi and I sampled as many of the aesthetic delights on offer that we could find time for. Visits to the Uffizi and Pitti museums, crammed with *quattrocento* masterpieces, were, naturally, *de rigueur*. At the Uffizi new depths of absurdity were plumbed by the American lady tourist, who, along with her husband (I presumed) preceded us in the queue lined up to view the Botticelli *Venus*. Pulling impatiently at the audio commentary device with which she had been issued, she turned to her spouse and, in a strong Middle West accent, proclaimed “Elmer, I’m getting *music* through my earphones!”

I first glimpsed Mimi, my dear wife of more than three decades, pounding a typewriter in the office she shared, as a permanent temp¹ in Operational Research, with Barbara Silver, the mathematics department secretary. Instantly falling for Mimi’s Oriental charm, I started to hang around the office trying in my less-than subtle way to scrape up an acquaintance. Eventually I succeeded in persuading her to accompany me to the British Museum, just a few minutes’ walk from

¹ The term “temp” was used for a secretarial worker provided by an employment agency ostensibly on a temporary basis. Once a temp had held her job for a sufficient length of time she was deemed to be “permanent”.

the LSE. I'd somehow conceived the notion that Mimi was Japanese, and as we wandered around the museum I claimed—in a ludicrous effort to impress—that I could distinguish a Chinese from a Japanese on appearance alone. Naturally, she then put my so-called ability to the test, asking me which I thought she was. “Japanese,” I asserted confidently. “Ha! I’m Chinese.” she responded, the triumph evident in her voice. “Oops,” was all I could come up with at that point. Having successfully made a complete fool of myself within the first five minutes of our first date, I desperately sought some way of redeeming myself in Mimi’s eyes. My opportunity arose when she told me that she hailed from Singapore. I immediately launched into a disquisition on, of all things, urban monkeys, which I happened to know were common in Singapore and other South East Asian cities. She seemed impressed by my apparent familiarity with this subject. Sadly, my status as an expert on urban monkeys collapsed when I let slip the fact that everything I knew of the subject had been gleaned from the pages of a recent number of the *Scientific American*.

Despite this initial fiasco with Mimi (and Barbara Silver’s warning her that I was mad), we began to see each other with increasing frequency. Mimi had been in Britain for only a year and still spoke (fluent) English with a Singapore accent. To my ears, her speech contained a number of charming oddities. For instance, in expressing disgust, she would say “ughs” rather than “ugh”. Especially amusing to me was her trick of displacing stress from verb to pronoun. So, for example, in place of “You should have *told* me”, Mimi would say “You should have told *me*.” To this I would quip, “As opposed to the man in the *moon*,” the sort of remark which mystified Mimi at first, but to which she soon began to reply with her characteristically inflected “Oh John, you’re so irritating!” Speaking of the moon, I recall that when one evening I pointed to the full moon with an extended forefinger Mimi cautioned me that according to Chinese folklore in doing so one risked having the tip of one’s finger turn into a snake’s head. Mimi would also on occasion say “hand” when she meant “(fore)arm”—because, as she explained, in Chinese (in her dialect at least), the term “hand” signifies that part of the arm extending from elbow to fingertips. (After Mimi and I were married I joked to her that instead of complaining “I’m sick and tired of waiting on you hand and foot”, she would come up with “I’m tired and sick of waiting on you arm and leg”.) A memorable linguistic mixup arose as a result of Mimi’s interest in swimming. I had been impressed to learn that she had been a swimming champion at her high school in Singapore. One day she told me that she was going off for a swim, and in all innocence I asked her “Do you use the ULU pool?”—meaning the University of London Union, commonly known by its initials. To my bewilderment, she bristled at my question, demanding angrily to know what I meant by “the ULU pool”. When I explained, she told me that she had thought I was ridiculing her, since

in “Singlish” (Singapore English) the term “ulu” is the equivalent of “the sticks” or “fifty miles from nowhere”. (But how could I have known this usage of the term?) Another instance was the occasion on which Mimi pulled from her purse a cylinder of the Singaporean plum wafers¹ she adored and offered me one. “An aphrodisiac?” I enquired hopefully. “After this what?” was her response.

Sometime in 1969 Mimi moved into a flat near Archway, not far from the Talbot Road apartment I was then sharing with Jumbo. Mimi’s flat, which she shared with Sarah Schofield, an LSE sociology student, occupied the top floor of a dilapidated house owned by an obsessive Greek Cypriot, whom we quickly christened “Mr. Acropolis”. This character, a Levantine counterpart to the yet uninvented Basil Fawly, made my landlady Mrs. Cliffhanger seem positively permissive. The instant Mimi and her flatmate moved in, Acropolis emerged, as if from the woodwork, and commenced to lay down a number of curious rules and regulations. Among these was the injunction that there were to be no more than two visitors on the premises at any one time, since, as Acropolis put it, the presence of any more “might cause the floors to give way”—an eventuality the decrepit condition of the place made all too likely. He also urged that use be made of the vacuum cleaner that he had, with unparalleled generosity, made available. He evidently took great pride in this appliance. Tenants had only to phone him up and ask if they could borrow it. “Sometimes I say yes, sometimes I say no,” he finally announced with proprietary satisfaction. (“And sometimes,” I quipped, “I let the vacuum cleaner do the talking.”) I don’t recall Mimi and Sarah rushing to take up Acropolis’s handsome offer. In any case it would have been foolhardy to apply a vacuum cleaner to floors that, according to the man himself, might collapse under the weight of a mere extra guest. Another of Acropolis’ idiosyncracies was his apparent fascination with the contents of his tenants’ dustbins. He could often be seen in the morning subjecting these to minute scrutiny, as if in search of some discarded treasure.

Mimi and I marched together on a number of anti-Vietnam war demonstrations, one of which was the massive effort in London in 1970 in protest at Nixon’s enlargement of the war to Cambodia. In an attempt at preventing protestors reaching the American embassy in Grosvenor Square, police on horseback mounted a charge. This induced a human wave in the phalanx coursing down the narrow street in which we happened to find ourselves, with the result that, literally, and frighteningly, Mimi was swept off her feet: instinctively, I grabbed her and tried to keep both of us from being sucked under. By some miracle

¹ These are similar in size and shape to the Necco wafers with which I was familiar from my American upbringing.

we contrived to struggle our way through the crowd, emerging unscathed but chastened.

My first exposure to the delights of Chinese cuisine came through accompanying Mimi to restaurants in Soho's Chinatown. At that time it was unusual, even in London, for Chinese girls to go out with Western boys, and it was obvious that the Chinese waiters took a dim view of our appearance together. We often had to wait unconscionably long for our order to arrive—the old “slow boat from China” routine, I called it. While we cooled our heels the waiters would mutter in Cantonese (not Mimi's dialect, but she could understand more or less what they were saying) “What's she doing with a red devil? Aren't Chinese boys good enough for her?” The ultimate affront to the waiters at one Soho restaurant was delivered when Mimi showed up for lunch one day with no fewer than three barbarians in tow—Jumbo, Pete Duncan and myself.

My long hair and NHS specs, coupled with Mimi's evident oriental origins, lent us as a couple a superficial resemblance to John Lennon and Yoko Ono. Walking together through the London streets in the late sixties we often heard the half-derisory, half-envious cry “John and Yoko!”. “It's Mimi, not Yoko!” I would shout back.

Mimi and I soon decided to shack up together. The obvious place for us to set up house was at 32A Talbot Road, which meant displacing Jumbo, who fortunately was able to find himself a new billet up an adjoining street. Soon after he and Pete Duncan bought a flat in Southfields near Wimbledon.

One day in 1970 Mimi received an alarming communication from the British Home office stating that her student visa was to be withdrawn and that she would accordingly have no right to remain in the country. On enquiring of an immigration officer as to what she could do to avoid deportation, she was told that her sole recourse would be to acquire British nationality by finding a British husband—“and *that's* not very likely, is it?”, the bureaucrat added nastily. What of course the man didn't know was that Mimi did have a potential British husband—myself. Clearly, marriage had become a necessary condition for us to remain together. (As Stan Aquarone observed after we tied the knot, “Some people have shotgun weddings, yours came courtesy of the British Home Office.”) But still we wavered. In an unconscious updating of *Hamlet*, I told Mimi, that, if marriage could be effected by the mere push of a button, I'd be the first to push it: to push, or not to push! Of course, my problem, unlike Hamlet's, was to locate the button. I found and then pushed my own button after a sleepless night at George Wilmers's flat in Manchester. George had provided us with what looked like a perfectly serviceable mattress on which to bed down. But it proved to be stuffed with a variety of curious sharp objects which surfaced continually during the night. After tossing and turning till daybreak on this bed of nails, I finally broke down and asked Mimi for

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her hand. My proposal was accepted (but Mimi wisely hung on to her hand) and we quickly advanced to the next hurdle: how to present our impending union to Mimi's parents without giving them heart attacks. As traditional Chinese, they would take an even dimmer view of our relationship than had the Soho waiters—the very idea of their youngest daughter marrying a Western barbarian (a red-haired devil, in Chinese parlance) would be nothing short of anathema. (It mattered little to me what my own father thought of an interracial marriage, but I was somewhat disappointed to learn that he had had reservations about the idea, even though he claimed later to have overcome them.) Mimi's sisters kindly assumed the responsibility of breaking the news to her mother, who could not in any case have been prevented from learning of it indirectly. Alarmed at first, Mimi's mother was relieved when she learned that her daughter's prospective husband, while non-Chinese, was at least a scholar of some sort (however obscure). It was felt that Mimi's father, who was considerably older than her mother and in failing health, should be spared the full blow, so he was told that I was "half-Chinese", thereby receiving, presumably, a mere half-blow. I suggested half-seriously that perhaps I should send a photograph of myself suitably doctored to furnish me with oriental features—along the lines of the "Tricke Dickee" cartoon which showed an orientalized Richard Nixon on his recent much-publicized visit to China. Needless to say, this facetious suggestion was not acted on.

So it was that on the morning of 28 November 1970 the "three me's" (as I had come to refer to Mimi and me) formally tied the knot at the Wood Green Register Office. In close attendance at this historic ceremony were some of my dearest friends—Michele and Spencer, George, Jumbo and Pete Duncan—as well as Mimi's niece Ling. Mimi recalls that at the crucial moment the presiding official mispronounced her full name—*Mimi Lian Eng Chia*—and I, true pedant that I am, corrected him. Afterwards we all repaired to 32A Talbot Road for an extended bout of revelry. A number of our friends drifted in and out during the day—George's mother, Nick and Demo, Demo's mother, Sarah Schofield, our Peruvian friend Luis Pacheco, and probably others whose presence I cannot now recall. Dick Beall showed up brandishing a bottle of Scotch; he managed to get Jumbo thoroughly drunk—the only time I have ever seen this happen. Around 2 a.m., the remaining revellers, now peckish, trooped down to Soho for a Chinese meal. I cannot recall how we got there—it could not have been by tube since they had stopped running for the night. (Did we fly?) The following day, a Sunday, Mimi and I surfaced in the early afternoon feeling delightfully light-headed. We wandered around Lincoln's Inn Fields, where Mimi took a few snapshots of me bedecked in her purple felt hat and billowy Indian scarf, which I had zanily insisted on donning. The affair was wholly sixties *Barefoot in the Park* (or was it *Breakfast at Tiffany's*?)

self-indulgence—but we were happy and cared not for what the morrow might bring.

Once our nuptial ecstasies had subsided, Mimi and I took stock of our situation. The most pressing issue we faced was that of finding an unfurnished flat—an apartment uncluttered, that is, with the monstrosities passed off as furniture by a troll, resident or not. At that time such occupancies in London were as scarce as hens' teeth, owing to the fact that rent controls applied only to unfurnished flats and not to their furnished counterparts. (Of course this meant that an unscrupulous landlord could contrive, usually with success, to delete the “un” in an unfurnished flat by throwing in a couple of seatless chairs, a three-legged table, and sufficient morsels of cheese to attract a few companionable mice for the final domestic touch.) Unfurnished flats in London, with their low regulated rents, were treated by their tenants as precious heirlooms, to be handed down with discrimination from one generation to the next. On the rare occasions on which one of these desirable billets changed hands, it was accompanied by the disbursement of the so-called key money, a sum whose exorbitance varied, somewhat in the Newtonian manner, with the inverse square of the rent, and for which one received nothing in return but the latchkey.

Our unfurnished Xanadu turned up as the result of a happy chance. Driving through Highbury Corner one day, Jumbo and Mimi happened to spot a “Flat to let (unfurnished)” sign posted in the display window of a furniture store, London Ideal Homes. We were pleasantly surprised to find on enquiring there that a three room unfurnished flat was indeed available to let, at the remarkably reasonable monthly rent of £23.83. To secure the place we had merely to purchase £300 worth of furniture from London Ideal Homes. While £300 was a considerable sum (my annual salary at that point not exceeding £1500), unlike key money it would at least be parted with for the purchase of something tangible. Fortunately by that time I had received the initial royalties for *Models and Ultraproducts* which more than covered the amount.

We were taken to view the premises, as the phrase went, by a Mr. Coffey, an affable salesman type. The premises proved to be the very opposite of a flat, its rooms dispersed among the top several floors of a large 19th century terrace house in Alexandra Grove, just off Seven Sisters Road adjoining Finsbury Park. We trod up a grimy windowless staircase to an entrance door which, like an Oxford oak, was hinged to open outwards—but instead of concealing, as at Oxford, yet another door, it opened directly onto a short steep flight of steps leading upwards to the first landing. The flat consisted of three large rooms, one per floor, each of which was gratifyingly empty. We were delighted with the place and eager to take it. Mr. Coffey scribbled something in a notebook and told us that the place was ours provided we came up with the furniture money. I was curious to see what he had written and contrived to get a look at his notebook. I was taken aback to spot,

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among the various annotations concerning our suitability as tenants, the observation “wife Chinese”. Mr. Coffey’s affability suddenly seemed rather less appealing. In those days of racial discrimination, we might well have been turned away had either of us been black. But as a Chinese Mimi must have counted as an honorary white.

So all that remained was the selection of the furniture. Unfortunately, the merchandise London Ideal Homes had to offer consisted chiefly of mint versions of the chintzy furnishings which we were so eager to see the last of. Finally we settled on an immense double bed and two large pieces of carpet, one red, one blue. These came to no more than £300, to the chagrin of the salesman who had urged us to buy more.

At this point we happened to meet Bas and Judy van Fraassen, who were then visiting London. Not only did we greatly enjoy their company, their Volkswagen van proved indispensable in conveying our belongings to our new residence.

Setting up house for ourselves for the first time provided the exciting opportunity to exercise our own fancy in choosing the décor. This meant in particular venturing beyond clinical white to the use of more daring colours. Thus we painted the end wall of what served as our living room an iridescent red. The top room we daubed entirely in psychedelic purple, with carpet to match. In a fit of extravagance, we smothered the walls of the small bathroom with fuzzy Indian restaurant wallpaper.

Located within easy reach of Central London, our new establishment—which we quickly dubbed Alexandra Groove—proved highly attractive to visitors, and they showed up in what seems in recollection an unbroken stream. Peter Riswold, whom I had not seen for a number of years, was an unexpected early arrival. Peter had become a capable chess player—naturally he made mincemeat of me when I foolishly accepted his challenge to a game. But I was, I confess, curious to see what would happen when he encountered a really accomplished performer like George. Peter was beaten, but he cheerfully accepted George’s superiority at chess.

Another early visit to our newly founded establishment was paid by Mimi’s mother on the only trip she ever made to the West. Mimi had told me that it would please her mother if I were to call her “Meh”, the Hakka version of “Ma”. Given my usual dog-like impulse to please, the uttering of a mere monosyllable was well within my grasp, and, when I did so, I was moved to see Meh’s face light up. I recall how pleased she seemed to be with the breakfast I cooked for her one morning, complete with sausages and tomato. Of course, as a high-born Chinese lady, she had never been required to develop so much as the mundane skill of boiling an egg, so she had every reason to be impressed by my humble efforts. We got along very well, undoubtedly aided by (but I hope not entirely due to) the fact that her English was on a par with my Chinese,

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that is, nil. Words can be barbs, and my relationship with Mimi's mother, its harmony reinforced through mutual incomprehension, was never disturbed—apart from my use of that gentle “Meh”—by the exchange of either.

A later house-guest was the Argentinian logician Max Dickmann, whom I had first met in 1969, and whom Pinochet's coup in Chile in September 1973 had rendered jobless. It is a testimony to Max's mental toughness (a quality in Moshe Machover which also impressed me) that the loss of his job and the brutal obliteration of his political hopes (for more about which see below) had failed to demoralize him. Of course he still had mathematics—Max was, and is, one of the most dedicated mathematicians I have ever met. I admired (and still admire) him for his devotion to the subject. By comparison my own relationship with mathematics amounted, I felt, to no more than a youthful flirtation.

Mimi and I offered Max the use of our spare room as a London base while he searched for a new position. During the weeks he lodged with us we spent many an evening in heated political and mathematical discussion, deepening my feelings of camaraderie with him. I was delighted to find that we shared a sense of humour—an indispensable attribute in any houseguest of ours. Max took instantly to the sublime nonsense of S. J. Perelman, excerpts from whose writings I would regularly read out loud after dinner. *Insert Flap 'A' and Throw Away, A Farewell to Omsk, Farewell, My Lovely Appetizer, Westward Ha!*—I could scarcely believe my eyes on first reading these pieces, nor could Max believe his ears when he first heard them. Perelman's description, from *The Back of Beyond*, of the questionable cuisine at his Penang hotel is simply unsurpassable:

I doubt if anyone short of Dante could describe the cookery at the Western & Occidental Hotel. I have heard it defended on the ground that it is no worse than the fare in any British colonial hotel, which is like saying that measles is no worse than virus pneumonia. The meal usually led off with a eerie gumbo identified as pumpkin soup, puce in color and dysenteric in effect. This was followed by a crisp morsel of the fish called selangor for want of a more scathing term, reminiscent in texture of a Daniel Green comfy slipper fried in deep fat. The roast was a pale, resilient scintilla of mutton that turned the tines of the fork, garnished with a spoonful of greenish boiled string and a dab of penicillin posing as a potato. For dessert there was gula Malacca, a glutinous blob of sago swimming in skimmed milk and caramel syrup, so indescribably saccharine that it produced a ringing in the ears and screams of anguish from the bridgework. As the diner slowly stiffened in his chair, his features settling into the ghastly smile known as the risus sardonicus, the waiter administered the coup de grâce, a savory contrived of a mouldy sardine spreadeagled on a bit of blackened toast. The exact nature of the thimbleful of rusty brown fluid that concluded the repast was uncertain. The only other time I saw it, awash in the scuppers of the President Monroe, the sailors called it bilge.

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Max was also greatly amused by the so-called “cat vibrations”. This remarkable phenomenon was induced by placing our tabby cat “Pussoids” on a ledge on the kitchen cupboard, and tickling her back paw nearest the cupboard door. There would follow a rapid vibratory motion of the paw against the door, producing a drum-like tattoo. Another of this singular feline’s accomplishments, which I proudly demonstrated to Max, was her retrieval of corks. If one was thrown down the stairs, she would rush off in dog-like pursuit, catching it in her mouth before it reached the bottom, and then scamper back up the stairs and deposit it on our bed. Even more canine was her habit of picking up a cork in her mouth, dropping it in front of us, and waiting for it to be thrown for her retrieval. I don’t doubt that, like the fabulous Siegel felines, she could also have mastered the technique of stamp-licking, but this was never put to the test.

But it was not pure aileurophilia that had led us to acquire a cat. For soon after our move to Alexandra Grove, we began to hear the occasional scrabbling sound from behind the walls. Our suspicions as to the source were suddenly confirmed when one evening I opened the kitchen cupboard door to find three baby mice nonchalantly nibbling away at some crackers. We thereupon decided to lay down poison. We bought a supply of pellets which the local supplier assured us would fell an elephant, and scattered these in the various places we suspected our unwanted guests might hang out. The following day all the pellets had apparently been consumed, and for a time all was quiet. But a couple of days later the scrabbling resumed with redoubled intensity. It sounded as if, instead of dropping like flies (let alone elephants), the mice were positively thriving on their new diet. I began to worry that prolonged exposure to this regimen might result in a generation of gargantuan rodents ready to hand us our marching orders!

At this point we decided to employ that old standby, the trusty mousetrap. We bought a number of these and primed them with traditional “mousetrap” cheese. The following day we were surprised to find that, while the cheese had vanished from a number of the traps some of these were still unsprung—of course even the sprung traps had failed to ensnare anything. Clearly the cunning critters had learned somehow to flick the cheese off the tongue of the trap without springing it. At this point it occurred to me to bait the traps with the poison pellets which had proved so appetizing. I attached the pellets with honey to frustrate the mice’s putative cheese-flicking technique, and awaited developments. Next day, sure enough, a couple had succumbed to my wiles. But my initial sense of triumph quickly gave way to a feeling of pity for the pathetic squashed creatures. It was then that we decided to abandon the whole sordid business of traps and pellets and get a cat.

Adept as “Pussoids” was at cork-retrieval and vibration, she proved strangely indifferent to the business of rodent pursuit. Nevertheless her

very installation seemed to have the effect of driving off the mice, or, at least, of making their presence less felt. By the time of Max's arrival at Alexandra Grove I had become quite complacent about the matter. But my complacency was soon jolted. We had put Max up on a mattress in our front room, which adjoined the kitchen. Sitting at the kitchen table one morning, before Max had woken, I was startled to hear a shout of "Caramba!" from the next room, followed by the bursting of Max into the kitchen with the news that he had been woken up by a pair of mice frolicking right under his nose. Unnerving as the experience must have been, Max's sense of humour was quickly restored by a *cafecito*. But this still left the problem of the mice, an issue that, as far as I can recall, was never wholly resolved.

Mimi's brother-in-law, who ran a television rental and repair business in East London, sold us a series of reconditioned sets at nominal prices. Each would last a few months, and then expire with a loud bang, a blinding flash, and a puff of acrid smoke. It was on the murky screen of one of these temperamental contraptions that we watched the historic struggle in the summer of 1972 between Bobby Fischer and Boris Spassky for the world chess crown. This, the only occasion on which a chess match held the world's attention, was an extraordinary combination of drama and farce. Fischer's erratic behaviour made it unclear whether the match would even get off the ground. After a late start Fischer lost the first game through comparatively weak play and then raised a fuss about the presence of television cameras which led to his failure to turn up for the second game, thereby forfeiting it. At this point most observers believed that Fischer, now 2-0 down, had self-destructed. But Fischer made a spirited comeback and eventually beat Spassky 12 ½ - 8 ½. This was one of the most remarkable battles of the Cold War.¹

Also memorable, if for entirely different reasons, was the battle that took place early in 1972 between the mineworkers' union and the Tory government of the day, headed by Edward "Grocer" Heath. In January the miners struck for the first time since 1926, to which Heath responded by imposing a three day working week and rotating power cuts. Government spokesmen suggested laughable power saving measures such as sharing baths and brushing one's teeth in the dark. The nadir of absurdity was plumbed by Patrick Jenkin, a minor minister in Heath's cabinet, who in an interview claimed that he had taken up shaving in the dark, later admitting that he used an electric razor. The 1972 strike was resolved within a few weeks, but two years later the miners struck again, this time leading to the toppling of

¹ Sadly, Fischer—whom many believe to have been the greatest chess player of all time—later became deranged, making a number of radio broadcasts bristling with paranoid denunciations of American Jewry, which he had come to believe were conspiring against him (Fischer is himself of Jewish origin).

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Heath's government and the return of a Labour government under Harold Wilson.

Like many of my generation, I had gotten quite heavily into cannabis smoking. Typically, after a few inhalations I would be reduced to helpless laughter, while further exposure had the effect of heightening and stretching the present moment, the "now", to an extraordinary degree. Music in general, and the sound of Heifetz's violin in particular, became almost intolerably intense. Jazz also: I recall hearing Coltrane's *My Favorite Things* under the influence and feeling that I had become somehow trapped inside the music, that it would continue for ever and I would never escape. The intensification of the present also had the effect of blotting out the immediate past, making reasoned argument impossible, since, as in *Mr. Sammler's Planet* (the novel of Saul Bellow's I had come to like best) premises had a tendency to decay before the conclusion was reached. I recall one evening getting high with George and the two of us attempting to grasp, amid gales of laughter, the structure of that most familiar form of logical argument, *modus ponens*:

$$\frac{A \quad A \rightarrow B}{B}$$

I found that, by the time I directed my attention to the second premise $A \rightarrow B$, I had forgotten the initial premise A , so forcing a return thereto, thus setting up a loop which prevented my ever arriving at the conclusion B .

This was odd but still amusing. Of a very different nature was the bad trip I underwent one evening. Perhaps the stuff we were smoking on that occasion was rogue, but after a number of inhalations I developed the paranoid notion that the police were on their way to bust us. I insisted on opening the windows looking onto the street in order, I said, to clear the air. I then hung out the window to watch for the police's imminent arrival, convinced that, if and when they did, I would throw myself into the street. Fortunately the rest of the company was sufficiently stoned as to remain unperturbed by my delusions. The police failing to show up, we all went to bed. But in recalling my experience the following day I was so shaken that I resolved to forswear the substance. I have not turned on since.

Fond as we had become of our quarters in Alexandra Grove, it had to be admitted that the neighbourhood itself was somewhat rough. The area had in fact become a notorious red light district. This was brought home forcibly to us when one evening we answered a knock on our door to admit a police constable who informed us that he was "making inquiries into the recent violent demise of a young woman of these parts", or some such locution. It seemed that, a few days before, the poor woman, a prostitute, had been murdered just around the corner from us. The constable wanted to know whether we had seen or heard

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anything “out of the ordinary” at the time in question. We responded in the negative, adding that, in these parts, drunken shouting in the street below at night was hardly unusual. I don’t know whether the murderer was ever caught.

The Finsbury Park area was replete with pubs, most of which were sawdust and spittoon joints on the order of the Malemute Saloon, into which one ventured at one’s peril: I christened them “The Broken Arms”, “The Old Ruptured Spleen”, “The Fractured Skull and Bludgeon”, etc. Mimi and I had been nonplussed to see a trail of bloody footprints on the sidewalk leading from one of these establishments straight into the nearest betting shop, of which there was also no shortage in the neighbourhood. There was a pub close by the childrens’ playground in Finsbury Park to which the mothers would bring their toddlers early in the afternoon. When the pub closed at 2.30 the drunks, sluiced unceremoniously out into the street, would lurch straight into the playground, and mingle with the toddlers, to the consternation of their mothers. I joked that one of these drunks might well regale the toddlers with the old routine:

Is this Wembley? No, it’s Thursday. So am I, let’s have a drink!

On first moving to Alexandra Grove we discovered that the pub nearest us, The Hornsey Wood Tavern, afforded a pleasant contrast, with an affable landlord and a quiet atmosphere. But this was, sadly, not to last. We walked in one day to find that the place had been taken over by a bunch of National Front types, barely able to suppress their *Sieg Heills*. From that point on we drank our beer at home.

Such unpleasantness was, unfortunately, not to be fully escaped even once our front door was shut. The trouble arose with the flat just below us. When we moved in this was occupied by a pleasant middle-aged couple and their teen-aged daughter. A few months later the parents decamped leaving the daughter in sole residence. She quickly installed her current boyfriend, a thuggish-looking “wide boy” bulging with muscles. Judging from the thuds and yells which began to filter through the floor, this brute made it a habit to bounce his unfortunate girlfriend off the walls each night. I soon nicknamed him “The Pig”. Each evening he would pull up in a flashy new vehicle, prompting the speculation that he was in the hot car business—which indeed turned out to be the case. A succession of officials from the utility companies began to arrive in pursuit of payment of overdue gas and electricity bills, banging on the couple’s door to no avail. All this came to a head one day when the whole building became suffused with the smell of gas. The leak was quickly traced to the Pig’s flat, so I phoned the Gas Board and informed them accordingly. An official duly arrived and commenced the customary pounding on the Pig’s door. I knew that the couple were in, but they refused to open up. Eventually the gas man

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gave up and departed. By this time I had become sufficiently incensed to overcome my fear of being “duffed up” and began to hammer on the door, shouting that their bloody gas leak was endangering everybody in the building. Realizing that he now had to deal with a mere resident, the Pig finally opened the door and advanced menacingly on me, at the same time venting a stream of invective which curled my ears. Our altercation soon attracted the attention of Pat, the diminutive Irishman who occupied the ground floor flat with his young family. He had also had his fill of the Pig, and raised his voice in my support. This enraged the Pig still further, and he turned on Pat, threatening him that if he didn’t shut his gob, he and his kids would be sorry. But Pat and (even) I stood our ground, and the Pig, to our relief, soon withdrew into his lair. A few days later he disappeared, never to return. He must have been no more than one jump ahead of the law, since soon after his departure a couple of policemen arrived to question his girlfriend. It was then that we learned that he was wanted in connection with the theft of a number of vehicles, which were doubtless never recovered.

Despite her dubious taste in men, the girlfriend (whose name I cannot now recall) was actually quite pleasant. Mimi and I thought that her experience with the Pig might turn her off the wide boys. But no, for not long after the Pig’s departure she installed a new boyfriend, a diminished version of the Pig who inevitably became known as “The Piglet”. After his installation yells and thuds could again be heard, but now, to our relief, on a muted scale. And, mercifully, we were spared further gas leaks.

In December 1973 Mimi and I made our first visit to Singapore together. Before we left I reluctantly visited a barber in order to avoid falling foul of Singapore’s strait-laced policy of refusing to admit “hippies”: it was not unknown for long-haired young men arriving at Singapore airport to have their locks shorn on the spot.

But this was a trifle. In fact, like the Tuscan trip earlier that year, my first visit to Singapore was a voyage of discovery whose memory remains undimmed in my mind. Above all else I recall the sheer novelty of being received into the bosom of a vast and intricate Chinese family. We stayed in the mansion which Mimi’s father had built at the height of his commercial success in the 1930s. Although the house had clearly seen better days, the grandiosity of its conception was still evident, bringing to mind an antebellum mansion in the Old South. Its sheer scale was impressive: four separate families were accommodated within its many rooms. The rooms’ ceilings, designed for maximum air circulation to offset the equatorial heat, had a cathedral-like loftiness; their floors and fittings were of teak.

Our reception was nothing short of regal. We were continually taken out to lunch and dinner, a pure delight since at that time Singapore was nothing less than a culinary paradise. Indeed, it boasted such a number and diversity of restaurants that I speculated that, in a

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variation on the old laundry routine, half of the Singapore population was in the business of cooking for the other half! I recall in particular the piquant curries at the Rendezvous, the extraordinary steamboat and chicken rice at Swee Kee, the amazing seafood, the delectable dim sum, and Mimi's favorite, Char Kwei Teow, hawkers' fried noodles.

Several of the numerous members of the Chia clan stand out in my recollection. Mimi's brother Teck Sian and his family, in whose sector of the house on the second floor we stayed, were the souls of kindness and could not have been more hospitable. Her oldest brother Mun Sien, who lived with his family on the floor below, was an interesting character. As his father's eldest son, he had inherited the lion's share of the old man's fortune and as a result had been spared the necessity of earning a living in the usual sense. He had become quite reclusive, and was also something of a hypochondriac, as a result of childhood illness. On the rare occasions he would venture from the house it was to observe the horses at the racetrack, on whose performance he would advise his betting pals, to whom his shrewdness in that department had become well known. His combination of native intelligence and mandarin isolation, unique in my experience, rather fascinated me. But his male chauvinism, while unconscious, was deplorable, as was brought forcibly to my attention when, right out of the blue, he would order Mimi to "bring John a drink." Later I attempted to make light of this, but Mimi was justly incensed.

As tourists, Mimi and I naturally made a number of excursions: to the Singapore Botanical Gardens, and to Changi Beach, where the extreme pallor of my body shocked the local populace. (Mimi had come to call me the "beached whale".) Teck Sian lent Mimi his Volkswagen so that we could drive up the west coast of Malaysia, the idea being to get to Penang, which had been immortalized in my mind through S. J. Perelman's priceless description:

All together I spent three and a half weeks in Penang before the President Monroe nosed over the horizon, and this much I will say for it; if you ever want a perfect honeymoon spot, a place where scenery and climate fuse to produce unadulterated witchery, where life has the tremulous sweetness of a plucked lute string and darkness falls all too soon, go to the Hotel Plaza in new York. Of all the lethargic, benighted, somnolent fleabags this side of Hollywood, the port of Georgetown on the island of Penang is the most abysmal. At the time I was there, its recreational facilities consisted of four Tarzan films, a dance hall housing eighty-five pock-marked Malay delinquents, a funicular railway, and a third-rate beach situated five miles from nowhere. If, after exhausting the potentialities of these, you retained any appetite for sightseeing, you could visit the Ayer Itam temple and the botanical gardens. The former is possibly the largest, and unquestionably the dullest, Buddhist temple in Malaya, and no wastebasket is complete without a snapshot of this historic shrine. The botanical gardens boast many varieties of cactus not found anywhere, not even in the botanical gardens. The day I was there, I waited almost three minutes for them to show up, but never caught so

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much as a glimpse of anything resembling a cactus. I related the incident subsequently to a group of passengers aboard ship who were discussing occasions on which they had failed to find cacti, and it was unanimously agreed that my experience was by far the most unusual.

In the event we got no further than Malacca, where we stayed in a hotel which I recall only through the proximity of our room to the lift, the groaning and whining of whose machinery kept us awake all night. Malacca itself is now a somnolent little town, but it was once an important seaport, held successively by the Portuguese, the Dutch, and the British. It still shows much Portuguese influence, as exemplified by the old fort, whose crumbling walls and rusty cannons received our touristic scrutiny.

*

In 1971 I became involved in the organization of the Bertrand Russell Memorial Logic Conference, an initiative launched by a group of logicians opposed to NATO financing of conferences in mathematical logic. During the 1960s a number of British logic conferences had received funding from NATO¹, thus becoming officially identified as “NATO Advanced Study Institutes”. The funding of scientific conferences by military organizations such as NATO seems to have gone more or less unquestioned until in 1969 a public protest against such financing was mounted at the NATO supported logic conference held in Manchester. (I was not a registered participant at the Manchester conference, but I attended the meeting for a couple of days, staying with Peter Aczel.) The resulting declaration, which concluded with the phrase

we believe that scientific conferences should not be linked with organizations of this [i.e., Nato's] character

attracted nearly 40 signatures.

But this protest was ignored, and early in 1971 it emerged that the organizers of the logic conference to be held in Cambridge that summer—Robin Gandy, Adrian Mathias, Hartley Rogers, and Gert Müller—had secured NATO funding for it. Max Dickmann, Yoshindo Suzuki and George Wilmers, all of whom had signed the Manchester declaration, who also happened coincidentally to be visiting the Mathematical Institute in Aarhus, Denmark, decided accordingly to launch a stronger protest. They conceived the idea of staging a counter-conference somewhere in Denmark timed to coincide with the Cambridge meeting. To gain support for the proposal they wrote to a

¹ The '65 Leicester meeting I attended in my salad days was, happily, free of NATO support.

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number of logicians whom they felt might be sympathetic to its aims. A copy of their letter was also sent to the members of the organizing committee of the Cambridge conference. This letter contained the forthright declaration:

It is a fact—all too often an accepted fact—that NATO is a military alliance which gives ideological support to the massacre of hundreds of thousands of innocent people in Indo-China, and material support to a fascist dictatorship in Greece and to the furtherance of the aims of imperialism all over the world. We believe that it is morally indefensible that the scientific community should continue to prostitute itself by lending to this organization an air of respectability and culture in return for funds which it is sometimes difficult to obtain elsewhere.

Brave words! And words which resonated sufficiently with three of the letter's recipients—Moshe Machover, Alan Slomson, and myself—to move us to offer our active support for the project. Thus it was that our names came to be added to those of the original proposers of the counter-conference to form its Provisional Organizing Committee.

As the newly formed “Gang of Six” we proceeded to issue an urgent, and widely circulated letter to British logicians drawing to their attention the fact that the Cambridge conference was NATO financed and explaining our opposition to this in much the same language as the quotation above. We also emphasized that while our proposal had originally been conceived in protest against the NATO sponsoring of the official conference, we now also had it in mind to launch what we called an alternative conference which, in addition to offering the technical presentations customary at such meetings, would attempt to come to grips with the larger implications of our activity as mathematicians and logicians:

Our project is planned with the following principles in mind:

(I) Mathematicians should consider the social implications of their activity. (It is clear that a NATO sponsored conference would be unable to take into account such a principle.)

(II) The primary concern of mathematical logic is to analyse the foundations of mathematics. The (often abstruse) technical aspects of logic are of importance only within this context.

Meanwhile Robin Gandy, the Chairman of the organizing committee of the Cambridge conference, had responded to the first letter. He made the seemingly reasonable suggestion that we time our meeting so as not to clash with the Cambridge conference, thereby making it “possible for people to attend both,” and wound up his letter with the following appeal:

In conclusion may I once again beg that you will do your utmost to avoid splitting logic into “left” and “right” factions. Such a split may give satisfaction

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to those for whom politics is primarily an emotional outlet, but it has no rational merit. Even judged on purely political grounds it is foolish, as it means that those with strong political convictions can only preach to the already converted. And for our common interest—mathematical logic—it could be disastrous.

We likewise will do our best—by investigating ways in which NATO support can be dispensed with—to promote unity.

Alan pointed out that Gandy's response already represented a partial victory for our cause and suggested that all that we should now require from the organizing committee of the Cambridge conference was some sort of public assurance that they would not seek NATO funds in future. In return we should, he thought, offer to change the date of our conference. The open letter with which we finally responded to the organizers of the Cambridge conference incorporated Alan's suggestion, but in a stiffened form which I think we knew was unlikely to be acceded to by the Cambridge committee. George and I laboured on putting the finishing touches to what amounted to a manifesto:

Dear Colleague,

You will probably be aware that a NATO supported logic conference is to be held in Cambridge this August. We the undersigned are opposed to military involvement in science and have therefore proposed an alternative conference having no connection with any military body, to be held in Denmark at the same time as the Cambridge conference. We have already circulated a letter outlining our proposals to our colleagues which has met with an extremely encouraging response.

The Chairman of the organizing committee of the Cambridge conference has written to us suggesting that our proposed alternative conference should be held at such a time as to enable people to attend both. This open letter is a reply to this proposal and an attempt to explain our motives for the action we have taken.

Our aims in calling for an alternative conference are threefold:

- (I) To provide an alternative for those logicians who do not wish to attend a conference which is publicly associated with NATO.*
- (II) To ensure that there are no future logic conferences which are financed either by NATO or by any other military body.*
- (III) To create a gathering-point which would enable logicians to analyze the social implications of their activity and to assess the relationship of their science to mathematics generally.*

*It is precisely because of (II) that we are planning to hold our conference **at the same time** as the Cambridge meeting; we therefore cannot accept the proposal that we merely **postpone** our conference so as not to clash with the one at Cambridge. However, we have formulated a proposal which, if accepted by the organising committee of the Cambridge conference, would*

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make it highly improbable that NATO would continue to finance logic conferences; under these conditions we would agree to cancel our conference. Our proposal is contained in §7 below.

§1. NATO is a political and military organization whose aims and activities are deplored by many people. It is highly improper that logicians who share such views should be faced with a choice between forgoing the professional benefits of an annual conference, and attending a conference publicly associated with NATO.

§2. Why does NATO support logic conferences? Is it for purely altruistic reasons, out of an unquenchable love for science? Or does NATO obtain something in return, if only the association of its name with a cultural activity? It is clear that the organizers of the Cambridge conference found it necessary to associate their conference with NATO not because they are fanatic supporters of NATO but only because they knew that, implicitly or explicitly, this was required of them if they were to obtain NATO funds. We surmise that NATO supports scientific conferences because by so doing it lends itself an aura of culture and respectability and encourages the acquiescence of the scientific community with regard to its political and military activities.

§3. Another, more sinister aspect of NATO support is the growing dependence of the scientific community on funds administered by military sources. In the U.S. this dependence has already reached such a stage as to prove quite sufficient to reduce a large section of the community to complete political docility. Those few who have had the courage to make an open political protest have often been threatened with the withdrawal of their research grants—a fact which has proved an excellent deterrent to the others. §4 provides evidence that this phenomenon is beginning to occur nearer home.

§4. Some people have claimed that our action in organising a “counter”-conference is “divisive” of the logic community. We completely repudiate this charge. A short account of the events leading to our action is appropriate at this point.

*At the Manchester conference two years ago 36 people (some 20% of the participants) signed a declaration dissociating themselves from the aims of NATO and expressing the conviction that scientific conferences should not be linked with organizations of this character. In connection with §3 it is particularly interesting that many of the participants who did not sign let it be known that they entirely agreed with the content of the declaration but that they did not wish to publicly associate themselves with such a statement **because they feared the financial consequences.***

*In view of the above, the organizers of the Cambridge conference cannot claim that they were unaware of the strength of feeling on this issue. To have deliberately ignored this and set about organising a further NATO-sponsored conference **was itself a divisive action.** It is however possible that the organizers felt that they were in a sufficiently strong position to be able to ignore such protests; that the Manchester protest was treated with some contempt is illustrated by the fact that the published colloquium proceedings*

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contains only a short paraphrase of the protest in a footnote; the names of the signatories are not given. Moreover, the account of the colloquium in the JSL (Dec. 1970, p. 598) **completely fails to mention the protest.**

§5. It has been suggested that our action threatens to “split logic into ‘left’ and ‘right’ factions. Not only is that not our intention, but even the idea that this might be the objective consequence of our action is rather strange. There is no question of debaring anyone from our conference because of his political views. We simply do not wish to be associated with NATO. Indeed, if aim (II) of our conference is achieved, the original cause of the “split” will disappear.

§6. It is certainly possible to organize conferences without NATO support. Leicester '65 and Bedford '70 are examples. Dr. Gandy has pointed out to us that there is a considerable difference between the cost of a large conference such as Manchester '69 and that of a smaller conference as Bedford '70, and that it does not seem possible to organize such a large conference as Manchester '69 without support from some military body. Even if this is true (and it is not proven), the answer is that in the immediate future logicians will have to be content with smaller, but by no means inadequate budgets if they are to preserve their unity. This is the price we must pay, not only for unity, but for maintaining the integrity of our science. In our opinion it is not too high a price.

§7. We propose to the organising committee of the Cambridge conference that they issue the following statement which would also be printed verbatim in the conference volume”

“The organising committee wish to state that, whatever the views of individual members, this conference, as a organization, totally dissociates itself from the political activities and aims of NATO.”

§8. In conclusion, we observe that if the content of the above statement does not conflict with the true relationship of the Cambridge conference to NATO, then there is no reason why the organising committee should not make this statement publicly; if it does indeed so conflict, then our assertions concerning the prostitution of our science are indeed proven.

This was typed up by Mimi, photocopied at LSE, and disseminated to our fellow logicians.

After six weeks' silence, Robin Gandy finally responded. We had not really expected the Cambridge organising committee to accede to the proposal we had made in §7 of our letter. Indeed, §8, on which George and I had topiled, was appended to the document to furnish the moral justification for a proposal which we, in truth, felt would be rejected by our opponents; in anticipation, we had already begun to make preparations for our alternative conference. And sure enough, Gandy (an intelligent, genial English ex-communist, anagrammatically known as “Bingo Randy” to the merciless Oxford undergraduates he taught in the final stages of his academic career) began his reply by remarking:

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You will not be surprised to learn that our committee was unanimous in deciding not to pass a resolution of the kind proposed in your letter.

But the tone of his response was conciliatory, and after attempting to answer a couple of the points made in our letter, he concluded:

Speaking for myself, I am now less distressed than I was by the notion of an alternative conference. You seem to have assembled a good (if intensive) programme. It only remains for me to wish you very success.

Now that our conference was definitely going ahead, it occurred to us that it would be natural to dedicate it to the memory of Bertrand Russell, who had died, at the age of 98, the previous year. We felt that Russell, old radical that he was, would have been sympathetic with the anti-military aims of our conference. It happened that Moshe was acquainted with Chris Farley, the secretary of the Bertrand Russell Peace Foundation who had succeeded Ralph Schoenman. Over dinner one evening Moshe and I sought Farley's approval for associating Russell's name with our conference, asking him at the same time if the Russell Foundation might see its way to providing some much-needed financial support for our venture. He was happy for the Russell Foundation to endorse our venture, but regretted that its present impecunious state made the provision of any financial support impossible. This was a disappointment, but at least we had succeeded in linking Russell's name with our venture. We did not fail to note the irony of the fact that the Cambridge conference was to be partly held in Russell's old college, Trinity, while at the same time it would have quite unthinkable to associate Russell's name with NATO.

Word of the "logicians' conflict" had by this time reached the ears of the wider world, and at the end of June Moshe and I were interviewed by a reporter from the *New Scientist*. On July 1st the following article appeared in the magazine's *Feedback* column:

Rival conference

By accepting money from military establishments do scientific researchers compromise their autonomy and give implicit support to the military's activities? This question, which often crops up at professional meetings, is usually approached by the scientific community in unofficial, detached, and academic debates and discussions. However, a group of mathematical logicians, who used to attend a biennial "NATO Advanced Study Institute", can take no more. They are organising their own conference, called the Bertrand Russell Memorial Conference, which will clash with the NATO-sponsored one. The break-away group want to force their colleagues' hands. The conference, financed from the coffers of the North Atlantic Treaty Organisation, a predominantly military alliance between countries of North America and Western Europe, will be held this August in Cambridge. To prevent some of their fellow travelers from having it both ways by attending

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both conferences, the rebels will hold their meeting at the same time but in Denmark.

The rift in the logic community stretches back to the 1969 NATO conference in Manchester. At that meeting 36 people (about 20 per cent of the participants) signed a declaration dissociating themselves from the aims of NATO and expressing the conviction that scientific conferences should not be linked with organizations of this character. Many other participants privately agreed but refused to sign because they feared the financial consequences. When this year's organising committee, which includes Professor Robin Gandy, Oxford, accepted NATO funds, logicians in Denmark and in Britain went into action.

The provisional organising committee of the Russell Memorial Conference includes: Max Dickmann and Yoshindo Suzuki, Aarhus University (where Rudi Duetschke is studying); John Bell, LSE; Moshe Machover, Chelsea College; Alan Slomson, Leeds University; and George Wilmers, Manchester University. They feel that NATO hands out such funds to gain an aura of cultural respectability and to stifle the political and military [sic!] activities of scientists.

To the accusation that they are splitting logic into left and right factions, they reply that anyone may come to their conference. They offered to cancel the alternative conference if the organising committee of the Cambridge conference formally dissociated itself from the political aims of NATO. No such assurance was forthcoming so the alternative conference was on.

Machover estimates that between 50 and 60 will attend the conference. They already have the active support of such notables as Noam Chomsky of MIT, and Alexander Grothendieck, a freelance mathematician recognized as one of the "greats". However, money which is needed to bring speakers from America and to reimburse students' expenses, remains a problem.

Two weeks later this article elicited from a clearly nettled Gandy a reply with a nasty sting in its tail:

Sir,—There is one point at which your account of the rival conferences in mathematical logic...is not accurate. The Organising Committee of the Cambridge Summer School in Mathematical Logic was asked to do much more than dissociate itself from NATO's political aims. The relevant paragraphs in a letter from the breakaway group read (with my [emphasis]), as follows:—

"However, we have formulated a proposal which, if accepted by the organising committee of the Cambridge conference, would make it highly improbable that NATO would continue to finance logic conferences; under these conditions we would agree to cancel our conference. Our proposal is contained in §7 below.

§7. We propose...that they issue the following statement which would also be printed verbatim in the conference volume"

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“The organising committee wish to state that, whatever the views of individual members, this conference, as a organization, totally dissociates itself from the political activities and aims of NATO.

The aim is clear: no more NATO sponsored conferences. Now these conferences (Oxford 1963, Bristol 1964, Leeds 1967, Manchester 1969) have been highly successful exercises in transatlantic and East-West collaboration. (At Manchester there were lively contingents from Poland and Czechoslovakia; at Cambridge there will be Poles and Hungarians.) They have enabled Europeans to learn about the latest results in America—where much exciting work has been done—and they have stimulated the interest of many young mathematicians in mathematical logic. I am sure that most of the participants would wish this series of conferences to be continued. I do not know how this could be done without NATO support. (The Cambridge conference will cost over £10000.) Thus, if our committee had passed the proposed resolution, it would have been acting in a very bureaucratic, undemocratic, and unpopular way.

One of NATO’s aims is to promote scientific collaboration between its members. This is the only policy with which the conference, as an organization, is associated. At Cambridge (as on the committee) there will be both supporters and opponents of NATO’s strategic and political policies. It should be clear, and the committee is happy to affirm, that attendance at the conference in no way implies support for these other policies.

The Scientific Affairs Division of NATO finances some 50 scientific conferences each year. The only tests applied in deciding which conferences to support are scientific, and no political strings are attached. And, unlike the organizers of the Bertrand Russell Memorial Conference, it does not use its scientific conferences for propaganda purposes.

Our conference duly took place in August in the well-equipped high school in Uldum, a village not far from the port of Esbjerg in Denmark. Sixty people participated, including Peter Aczel, Jane Bridge, Anders Kock, Bill Lawvere, Per Lindström, Per Martin-Löf, Janos Onyskiewicz (a logician who, twenty years later, was to become the Minister of Defense in the immediate post-communist Polish government), Graham Priest, Jan Smith, Bill Tait and Aldo Ursini.

We were extremely fortunate in securing the presence of Alexandre Grothendieck, then in his early forties, and already arguably the greatest mathematician of the second half of the 20th century. I was struck, as were many of us at the conference, by Grothendieck’s sincerity and luminous intensity. With his shaved head and simple attire, he had the ascetic appearance of a Buddhist monk; from his talk one quickly became aware that one was in the presence of a man with a remarkable moral power. Himself an offspring of left-wing political radicals, Grothendieck’s own political radicalization in the 1960s had

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led him to form the group *Survivre*¹, dedicated to combating the ideology of scientism, the elevation of science into the “religion” of modern society. His pacifism had compelled him to resign his position at the *IHES*, the French counterpart of the Institute for Advanced Study when he learned that it was being partially funded from military sources. He was currently embroiled in a dispute at the *Collège de France* over his proposal to conduct a course on scientism. An active opponent of the American intervention in Vietnam, he had spent several months in Hanoi under sustained aerial bombardment while teaching at the city’s “subterranean university”. He gave a vivid account of his experiences during one of the evening discussions which took place at the conference; he also introduced a discussion on scientism and delivered a spellbinding lecture on his work in algebraic geometry. While the actual content of this latter was largely over my head, I recall being greatly impressed by the manner of its delivery: after speaking nonstop for two hours without notes, Grothendieck paused, extracted from his shirt pocket a slip of paper scarcely larger than a postage stamp, glanced at it as if to remind himself of something, returned it to his pocket, and then resumed lecturing for another two hours. Very approachable and amiable, he talked to everybody; in particular I had a number of animated conversations with him. I recall that he sketched his early life, remarking that he had been in an internment camp in France as a boy during the war. My delight can be imagined when our conversation took a musical turn and he confided to me that his favourite recording was none other than Heifetz’s version of the Bach solo violin sonatas! As a mathematician he was so far beyond me that the subject hardly came up in our discussions, but he never betrayed the slightest hint of condescension in that regard.

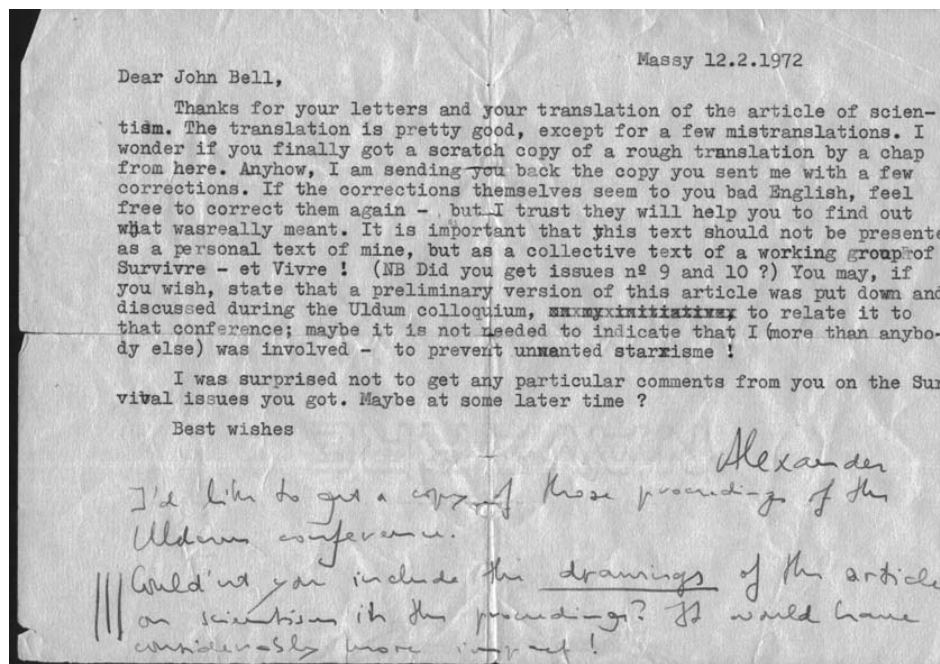
During the session on scientism Grothendieck read a preliminary draft of an editorial, entitled *The New Universal Church*, for a forthcoming issue of his group’s publication *Survivre et Vivre*. This excited considerable response, both pro and—from some “hard left” brethren—con. It must be admitted that the latter had a point: by comparison with his unexampled mathematical sophistication, Grothendieck’s political attitude was perhaps somewhat naïve. But Grothendieck’s naivety was on the order of Tolstoy’s, an unwavering refusal to compromise, white-hot in its intensity. It now seems to me that the *Survivre* group can be seen as a forerunner of the ecological movement and the Green Party, which of course itself encountered a good deal of opposition from the communists in its struggle for emergence.

After Grothendieck’s presentation I proposed to him that I make an English translation of the essay, which would appear in the published

¹ Other members of this group included such prominent French mathematicians as Pierre Cartier and Pierre Samuel.

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proceedings of the conference. He readily agreed; some months later I received the following letter from him:



The increasingly eccentric course that Grothendieck's life has taken since that time reinforces the parallel with Tolstoy. In 1973 Grothendieck left Paris for the south of France, where he lived for a number of years in seclusion near Montpellier. During 1980-90 he wrote thousands of pages of meditations, both mathematical and non-mathematical. Among the latter are the vast memoir *Récoltes et Semailles*, in which he excoriates the French mathematical establishment, and *La clef des songes* (The key of dreams), in which he presents his conviction that dreams are communicated by an external agency, the "Dreamer", itself identifiable with God. In 1988 Grothendieck refused the award of the prestigious Crafoord prize for his mathematical work. In his letter to the Swedish Royal Academy of Sciences turning down the prize, he explains his principal reasons for doing so, ending on an apocalyptic note:

The work that brought me to the kind attention of the Academy was done 25 years ago at a time when I was a member of the scientific community and essentially shared its spirit and its values. I left that environment in 1970, and, while retaining my passion for scientific research, inwardly I have retreated more and more from the scientific "milieu". Meanwhile, the ethics of the scientific community (at least among mathematicians) have declined to the point that outright theft among colleagues (especially at the expense of those

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who are in no position to defend themselves) has nearly become the general rule., and is in any case tolerated by all, even in the most obvious and iniquitous cases. Under these conditions, agreeing to participate in the game of “prizes” and “rewards” would also mean giving my approval to a spirit and trend in the scientific world that I view as being fundamentally unhealthy, and moreover condemned to disappear soon, so suicidal are this spirit and trend, spiritually and even intellectually and materially

This...reason is for me by far the most imperative one. Stating it is in no way meant as a criticism of the Royal Academy’s aims in the administration of its funds. I do not doubt that before the end of the century, totally unforeseen events will completely change our notions about “science” and its goals and the spirit in which scientific work is done. No doubt the Royal Academy will then be among the institutions and the people who will have an important role to play in this unprecedented renovation, after an equally unprecedented collapse of civilization.

In 1992, Grothendieck disappeared, severing all contacts with family, friends and colleagues. In 1996 he was reported to living somewhere in the Pyrenees, but according to Pierre Cartier, his present whereabouts (2003) are unknown.

Looking back, the mix of politics and mathematics at our conference could have been the agenda for a party to which nobody showed up. (It would doubtless be just that in the present politically vacuous epoch.) But on the contrary, the affair turned out to be a great success. Indeed many of the participants remarked what fun it had all been. My own participation was curtailed by coming down with a nasty form of flu during the final week, but before succumbing I gave the elementary course on set theory I had offered to provide, and a contributed paper. This latter—*A Geometric Form of the Axiom of Choice*¹—was a joint effort with David Fremlin, a Cambridge functional analyst I had met the previous year on a visit there—ironically, at the invitation of Adrian Mathias. Fremlin was less than happy with the idea of being associated with the political aims of our conference; in a letter he stated that he shouldn’t like anyone to assume that, simply because he was part author of a paper presented at our meeting, he had objections to NATO. I never got to know him sufficiently well to establish with certainty whether he actually entertained any such objections, but I would now guess that, like most of his mathematical confrères, he was fundamentally indifferent to the whole issue of political intrusions into mathematics, and so—in the case at hand—perturbed only at the possibility that a collaborator of his at a harmless mathematical level could turn out to be a dangerous hothead. He suggested that I preface my presentation of the paper with an oral disclaimer for him, to which I agreed. But the irony of my having to proclaim my coauthor’s

¹ Later published in *Fundamenta Mathematicae* LXXVII, 1972.

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dissociation from the dissociators was not lost on the audience, who responded with hoots of laughter.

The Russell Conference was also successful in helping us achieve our acknowledged goal of preventing future NATO financing of logic conferences. Remarkably, for the next seven years no applications were made for NATO money by logicians.

Along with Julian Cole, Graham Priest, and Alan Slomson, I became an editor of the conference proceedings. The publishers Davis-Poynter Ltd. expressed an interest in them. I had a meeting in London with the head of the firm, Mr. Davis-Poynter himself, who struck me as a bit smarmy, but I came away feeling reasonably certain that he would agree to publish. However upon receiving the typescript from Alan Slomson he turned it down, owing to, as he put it, "the complexity of the material". If he thought that Alan was simply going to accept this rejection without a fight he had badly underestimated his man. A memorably farcical exchange of letters, circulated by Alan to the members of our committee, followed:

October 18th 1972

Dear Mr. Davis-Poynter:

Thank you for your letter of October 16th. I am sorry that you have decided not to publish the Proceedings of the Bertrand Russell Memorial Logic Conference and also somewhat surprised.

When you first expressed interest in publishing the book we were concerned that you might have difficulty with the mathematical material and that is why I attempted to raise this in my letter to you of September 24th 1971. I gather that this was also discussed when you met John Bell last November and that you had this in mind when you wrote to me last February that you couldn't "imagine any difficulties arising from the contract". We had thought that the problem of the mathematical printing was to have been met by reproducing the volume photographically from typescript. In view of this I would be grateful if you would explain in more detail what it is about the material which has influenced your decision. This would be useful for us in deciding which other publishers to approach.

It would be helpful if you posted the typescripts back to me... I think it would be best if you made use of the new Compensation Fee arrangement provided by the Post Office...I expect you know that this can be done for a fee of 10p. Please let me know if you would like me to refund this and the cost of your postage.

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Yours sincerely,
Alan Slomson.

23rd October 1972

Dear Alan Slomson:

When we originally discussed the Proceedings in my office I understood that we would have perfect copy which would be suitable for reproduction. Unfortunately, that is not what has been provided and this means that the work will have to be retyped if it is to be printed in the manner I suggested or if it is to be set in the traditional way a printer found who has the special symbols and clear cut lines required. Either way, it will be a costly operation and I wonder how it could be produced at a price that is likely to prove other than [sic] prohibitive.

We are sending your typescript back under separate cover, using the new Compensation Fee you suggested.

Yours sincerely,
R.D. Davis-Poynter
Managing Director

October 28th 1972

Dear Mr. Davis-Poynter:

Thank you... for returning the typescripts... .

I am puzzled that you now say that you understood that you would receive perfect copy from us. We understood the opposite and I mentioned this in two of my earlier letters to you. Thus in my letter of November 1971 I wrote "I gather that you will have the material retyped for photographic reproduction. Please let me know if there is any special form in which you would like to receive the material." You did not mention this when I spoke to you on the phone a few days later. Again, when I wrote to you on February 7th 1972 about the terms for a contract the first point I mentioned was that "We will deliver the manuscript to you as soon as possible after April 1st 1972 and you will have it retyped for photographic reproduction and publish it." It was to this letter that you replied on February 8th "I can't imagine any difficulties arising from the contract." If you expected to receive the copy in a form which would not need retyping I think you should have mentioned it at this stage.

If we had known you wished to receive perfect copy we would, of course, have sent it to you in this form. Indeed it would still be possible for us to arrange for the material to be retyped in a form suitable for photographic reproduction. Nor do I think that this would be as expensive as you seem to imagine. Judging by the cost of having mathematical theses typed it would cost about £100 to have the material retyped. From what I know of the cost of

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printing material by photo-offset it seems to me that this would make it possible to produce the volume at a far from excessive price. Please let me know what you think about this.

I look forward to hearing from you.

*Yours sincerely,
Alan Slomson*

7th November 1972

Dear Alan Slomson:

I am sorry but I just don't think we could cope with the retyping, that was my point, since there are symbols used in the material supplied that are not available in the IBM system and to use any other method would in my view make the book extremely costly to produce.

*Yours sincerely,
R.G. Davis-Poynter
Managing Director*

November 11th 1972

Dear Mr. Davis-Poynter,

Thank you for your letter of November 7th. I find each of your letters more surprising than the one before. I thought I had made it clear in my letter of October 28th that we would be prepared to have the material retyped for photographic reproduction. Indeed your letter of October 23rd said that this is what you had expected all along. Now instead of responding to my offer to arrange for the retyping you complain that you could not cope with it because of some of the symbols involved.

I am not sure which symbols you have in mind. If there are one or two symbols which the typist who is willing to retype the material for us does not have on her machine then they can be inked in by hand. Provided this is done carefully the effect can be perfectly acceptable. I speak from considerable experience of mathematical typing; indeed one of my papers was published in a conference volume by photo-offset from typescript.

I note that you have not explained why you did not raise any of the problems you have recently mentioned in reply to my earlier letters which I quoted in my letter of October 28th. If you had said much earlier that you wanted to receive a clean typescript from us, or that you might have difficulty in having mathematical material retyped, we would have been saved some considerable inconvenience. In the circumstances I think you owe us an explanation or an apology.

I gather from your letters that you are no longer interested in publishing the proceedings of our conference. From this point of view it would only be a

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waste of time to prolong this correspondence. However, having previously told our contributors and the participants that you would be publishing the conference proceedings, I am now under an obligation to explain to them why you will not be publishing the proceedings after all. The explanations you have given so far do not seem to me very plausible as I have endeavoured to show in my letters where I have shown how the difficulties you have raised can be easily overcome. I would be grateful for the explanation that you would like me to pass on to the contributors and conference participants.

*Yours sincerely,
Alan Slomson*

16th November 1972

Dear Alan Slomson

I am extremely sorry that you find my letters surprising and apparently difficult to understand. Naturally, I find they are perfectly clear. I apologise for any inconvenience that may have been caused but I must remind you that from our first meeting I made it quite clear that I could not make any definite decision without sight of the final copy. In these circumstances it was rather premature of you to advise your contributors that I was to publish the proceedings.

*Yours sincerely
R.G. Davis-P*

November 25th 1972

Dear Mr Davis-Poynter,

Thank you for your letter of November 16th. I do not find your letters difficult to understand. I agree with you that they are perfectly clear. It is their clear meaning that I find surprising. Let me be specific.

In your letter of October 23rd you gave as your reason for not publishing the volume that we had not provided perfect copy as you expected and that the cost of retyping the material would be great and would make it impossible to produce the volume at other than a prohibitive price. I was surprised that you said you had expected to receive perfect copy because we had the opposite understanding and you made no comment about this when I mentioned it to you in two earlier letters. I was surprised that you thought retyping the material would be costly since I knew this could be done for about £100 and I thought this would compare favourably with the cost of conventional typesetting of non-technical material.

I made these points in my reply to your letter. I said that we would have provided perfect copy if we had known you expected it, and I said that it would still be possible to provide such copy, and I asked you what you thought about this. I was therefore surprised that in your reply, dated November 7th, you made no comment about our now providing you with perfect copy, as I had asked, but instead you said that you could not cope with the retyping.

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To remove my surprise I would be very grateful if you would let me have answers to the following specific questions:

- 1. If you expected to receive from us perfect copy why did you not mention this in reply to either my letter of November 16th 1971 or my letter of February 7th 1972?*
- 2. If you now received from us perfect copy ready for photographic reproduction would you be willing to publish the volume, and if not, why not?*

I agree that as things have turned out it was premature of me to advise our contributors that you would publish the proceedings. I know that we did not have a formal contract, but I thought we had an informal agreement that would only be broken for good reasons. It was not until your letter to me of February 8th 1972 that you told me that you could not make a definite decision until you saw the final copy and even in this letter you gave the impression that no difficulties could arise.

I look forward to receiving your replies to my two questions.

*Yours sincerely,
Alan Slomson.*

30th November 1972

Dear Alan Slomson

So that there can be no possible misunderstanding I write to confirm that I do not wish to publish the Proceedings of the Bertrand Russel [sic] Memorial Logic Conference which you have so kindly offered.

*Yours sincerely
R.G. Davis-Poynter
Managing Director*

December 5th 1972

Dear Mr Davis-Poynter,

Thank you for your letter of November 30th.

I note that you have not properly answered either of the questions I asked you in my letter of November 25th. You will, I am sure, understand if I draw my own conclusions about your methods of doing business.

*Yours sincerely,
Alan Slomson*

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In the copy Alan circulated of this last letter he appended, as a parting shot, the remark: "Not even a Christmas card in reply!"

Davis-Poynter's defection left us with no alternative but to publish the proceedings ourselves. I asked Barbara Silver if she would be willing, for a modest fee, to retype the manuscript. She readily agreed. So much, I thought, for Davis-Poynter's "inability to cope" with the retyping! Alan came up with a printer willing to produce the volume at reasonable cost. We sent out leaflets describing the contents of the volume, accompanied by an order form for purchase at a modest price. The response was highly gratifying—indeed we were surprised that sales of the volume yielded a handsome profit, which was deposited in a bank account opened in the name of the Russell Memorial Conference. How this money should be spent posed a problem we had not envisaged. We decided to hold an essay competition, with a prize of £100 awarded for the best (in our estimation) contribution on the social significance of mathematics. A number of efforts were submitted, but it seemed to us that none deserved the prize. So the idea of an essay competition was abandoned, and, lacking any other ideas, we left the money to languish in the bank, where it slowly accumulated interest. After a few years, Alan, who had responsibility for the account, began to worry that it might come to attract the unwelcome attentions of the Inland Revenue. He suggested that we quickly find a means of spending the money, which had, to my surprise, grown appreciably in the meanwhile. We decided that our best course was to use it to provide bursaries for Eastern European students wishing to attend Western logic conferences, which, thanks to our efforts, were still then unfinanced by military sources. This proved a most effective way of spending the money.

The published conference proceedings provides a reasonably faithful picture of what took place at the conference itself. It is an odd mixture of technical, philosophical, critical and political material, unique in the annals of logic: that it frightened Davis-Poynter off is, on reflection, hardly surprising! Cheek by jowl with articles on such technical matters as infinitary logic, nonstandard models for set theory and category theory are to be found analyses of NATO's role as a counter-revolutionary force, discussions of esotericism in mathematics, Grothendieck's critique of scientism along with critiques of his critique, various papers on the philosophy of mathematics, Alan's account of the events leading up to the conference, and a reprinting of Russell's obituary in the *Times*. Given our latitudinarian editorial policy, the result was surprisingly coherent.

During the conference I had brought to Per Lindström's attention some problems on a logical system I had introduced in my thesis: weak second-order logic with variables ranging over elementarily definable sets. While I had not been able to solve these problems, Lindström, an

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exceptionally talented logician, formulated elegant solutions to them which he wrote up and contributed to our volume.

My own contribution was a sub-Marcusian essay entitled *Some Remarks on Current Mathematical Practice*. Here are a few extracts:

Contemporary mathematics confronts the spectator with a formidable array of results and techniques, most of which appear to have little or no connection with reality. A point has been reached where mathematics, of necessity abstract, has become so arcane that it is difficult even for practicing mathematicians to see where it is going^a. As in other areas of scientific activity, production for production's sake has become the mathematician's chief aim, with the result that technical papers of an ever more mystifying nature are proliferating at an enormous rate. Underlying this state of affairs is a formalist ideology which, by encouraging the mathematician to assume a "neutral" attitude toward his activity and to devote himself exclusively to the imperative of production, has obscured the relationship between mathematics and reality and stifled work in the foundations and philosophy of mathematics.

The greater part of research activity in mathematics is devoted to proving theorems within the established mathematical framework which has made its appearance within the past three or four decades. This framework has three principal features:

- (i) its basic constituents are officially regarded as being of a purely formal character, i.e. meaningless in themselves;*
- (ii) it is sufficiently flexible to allow for the development of increasingly refined techniques within it;*
- (iii) it is, ostensibly, broad enough to enable all current mathematical notions to be expressed within it.*

In view of (i), the question of the meaning or use of the notions expressed and the results proved within this framework becomes an external problem, hence usually ignored. Once the questions of meaning and use have been removed from the scene, only technical internal criteria remain for determining the import of a mathematical result. This has the effect of making mathematics immune to criticism from the outside. Furthermore, this confining of attention to purely internal, technical aspects of the framework, together with the reinforcement provided by features (ii) and (iii), creates the impression that the framework is absolute. If a problem is insoluble within the established framework, it has become customary to regard it as absolutely insoluble (the continuum problem in set theory for instance)^b The idea of searching outside this framework for

^a Physicists are frequently critical of mathematical obscurity. A French Nobel laureate in physics declared recently that the unnecessarily exacting requirements imposed on physics students in French universities was scaring them off not only mathematics, but physics as well!

^b Compare this with the orthodox interpretation of the Heisenberg uncertainty principle in quantum theory, which is believed to provide an "absolute" refutation of causality in the small. For a critique of this interpretation, see D. Bohm, *Causality and Chance in Modern Physics*, pp. 94-103.

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inspiration is regarded as impious and, worse still, unprofessional. Activity within the framework itself boils down to a purely operational procedure applied to its constituents. Thus mathematical activity itself comes to be identified with operations within the framework, and mathematical concepts with its unchanging objects. In particular, the introduction of new mathematical concepts becomes a matter of reducing them to notions already present in the framework: if such reduction cannot be effected, the concept is rejected.

Under these conditions, mathematics comes to be viewed as a bundle of technical operations performed on a collection of fixed formal objects, from which all intrinsic meaning has been extracted. This in turn induces a shift in emphasis from content to production, from substance to technique. In this respect contemporary mathematics resembles the world of mass technology, which involves the production and manipulation of “neutralized” objects (including human beings) within an established economic structure. Certainly mathematics provides an excellent system for expressing technological manipulations in abstract “objective” form. Such subjects as military logistics and management “science” become both efficient and respectable when clothed in mathematical formalism.^c Establishment economics, with its expansionist goals and its plethora of “models, becomes merely another chapter in the growth of “neutral” mathematics. In cases like these the tremendous authority of mathematics has the effect of disguising the true nature of the subjects formalized.

The abstract-operational character of contemporary mathematics^d causes it to assume the form of a kind of rarefied technology, so that the goal of mathematics becomes the technological goal of production for its own sake. The struggle to produce forces mathematicians to become increasingly competitive: in order to survive as a mathematician, one must produce more results than one’s competitors. “Publish or Perish” becomes the order of the day. The competitive struggle is rendered all the more efficient by the elimination of embarrassing questions of meaning, purpose, etc. Moreover, the narrower the field of competition, the fewer the techniques one is required to master in order to succeed (and the fewer the competitors), so a tendency to specialize appears. (I do not mean to claim that the competitive struggle is the sole reason for specialization, only that it is an important factor in its emergence.) As the field of specialization itself narrows, its connection with the whole becomes less and less evident, so that the specialized activity becomes increasingly esoteric. But the imperative of technical production places both esoteric specialization and the “expert” practitioner entirely beyond criticism, so much so that many mathematicians profess to be ignorant of the meaning of the word “esotericism” when it is applied to their own activities!

^c No doubt the war analysts at the Pentagon would be delighted if World War III could be expressed in terms of, say, non-commutative semigroups.

^d It is of interest to note that certain philosophies, structuralism for instance, which assume contemporary mathematics as a basic descriptive framework, have a distinctly operational character.

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Professional esotericism in mathematics has also had an adverse effect on its teaching. Mathematics is routinely taught in an isolationist fashion, with great respect accorded to the minutiae of rigour, but little or none to the relationship of mathematics with reality, or to the historical genesis of mathematical ideas, or even to applications. The student of mathematics often leaves the lecture theatre completely mystified, and when he succeeds in gaining some understanding of the subject, he has the demoralizing impression that its creators must be intellectual supermen, of unchallengeable authority. The situation is still worse for the philosopher of mathematics, who is frequently regarded as a kind of failed mathematician. Under these conditions it is hardly surprising that the philosophy of mathematics is regarded by many mathematicians as a "dead" subject, a closed chapter in the history of mathematics, and in any case a subject distinctly inferior to mathematics itself. Mathematics is self-justifying, they proclaim, so why bother to develop a philosophy for it?

When I circulated this essay among my colleagues it elicited one of two responses: guarded approval or outright rejection. While a number of the claims made in it now seem to me somewhat exaggerated, the product of an overheated youthful radicalism (but of which I'm unashamed!) I believe that my central point concerning the imperative of production remains valid. Witness the present (2003) lamentable state of British universities, in which this imperative reigns supreme!

*

Early in 1972 Max Dickmann took up a position in the mathematics department of the Catholic University of Santiago in Chile. The election not long before of Salvador Allende's socialist party had excited real hopes that a peaceful transition to socialism there might be in the offing. George and I were keen to visit the country, and the fact that the Allende government had vastly expanded the budget for universities had made Max sanguine that he might be able to arrange positions for us in his new department. Soon after his arrival in Chile Max wrote us a richly detailed letter, the first of several, in which he confirmed that positions could be arranged for both of us, George to come the following year and myself the year after that. The greater part of Max's letter was devoted to an analysis of current political conditions in Chile. As a left-wing Latin American himself, he was naturally excited by the possibilities offered by the Chilean road to socialism.

Max could not have anticipated that the whole brave Chilean left-wing movement would be crushed by the hitherto silent, but, as we now know, devious, reactionary sectors of the Chilean military, led by the monstrous General Pinochet, with the covert support of Henry Kissinger and the C.I.A. The Chilean coup of September 11, 1973 unleashed a fascism of a ferocity unfelt since the days of Hitler. Allende himself died attempting to defend the Presidential Palace against the onslaught by Pinochet's forces. In the ensuing holocaust thousands of

