CECIL M.[92]

Cecil M. was born in London in 1905, developed the sleeping-sickness during the great epidemic, but appeared to have made a complete recovery from this until the onset of Parkinsonian and other symptoms twenty years later (1940). His initial symptom was megaphonia – a tendency to bellow and raise his voice – which was followed by the development of grunting, and a tendency to clench and grind the teeth. Within a few months of their onset these presenting symptoms disappeared, and were replaced by a Parkinsonian syndrome with impairment of balance, a tendency to backwards-falling, festination, freezing, and predominantly left-sided rigidity and tremor. By 1942, the clinical picture had stabilized and was to show no significant changes for the next quarter of a century. Mr M., who was an intelligent and resourceful man, found that he could lead a full life despite his symptoms: he continued to drive to business each day, to lead an active family and social life, and to maintain his many interests, hobbies, and physical activities – especially swimming, of which he was particularly fond, and which allowed a far more fluid and fluent motion than walking.

Mr M. was placed on L-DOPA in 1970. His initial responses may be described in his own words: 'In the early stages it seemed to have given me a new lease of life. I felt exhilarated and rejuvenated. The stiffness went out of my left arm and leg. I could use my left arm to shave and also to type. I could bend down with

92 Cecil M. was *not* an inmate of Mount Carmel, but an outpatient in London. Thus his 'situation' was quite unlike that of the profoundly ill patients who had been 'asleep' at Mount Carmel for decades; on the other hand, it was essentially similar to that of the many thousand post-encephalitic patients all over the world who, despite a certain degree of disability, have been able to lead full, independent, and essentially normal lives.

ease to do my shoe up. And of course I could walk with complete freedom and enjoy moving about, which is something I dreaded doing before. And the tremor in my left arm almost disappeared.'

On the sixteenth day of taking L-DOPA, when Mr M. was enjoying his new-found mobility and feelings of energy, he started to suffer from a recrudescence of the 'lock-jaw' or *trismus* he had briefly experienced in 1940. Over the next week Mr M.'s trismus became intense and continual, so that he could no longer open his mouth to eat or speak. Concurrently with this he experienced a return and indeed an exacerbation of his Parkinsonian freezing, rigidity, and tremor. At this point he indicated that he wished the L-DOPA to be stopped.

Mr M. has declined any subsequent trials of L-DOPA. He says: 'I have had this condition for more than thirty years and I have learnt to live with it. I know exactly where I am, what I can do, and what I can't do. Things don't change from day to day – or at least they didn't change till I was given L-DOPA. Its effect was very pleasant at first, but then it turned out more trouble than it was worth. I can get along perfectly well without it – why should I try L-DOPA again?'

LEONARD L.

I first saw Leonard L. in the spring of 1966. At this time Mr L. was in his forty-sixth year, completely speechless and completely without voluntary motion except for minute movements of the right hand. With these he could spell out messages on a small letter-board – this had been his only mode of communication for fifteen years and continued to be his only mode of communication until he was given L-DOPA in the spring of 1969.

Despite his almost incredible degree of immobility and disability, Mr L. was an avid reader (the pages had to be turned by someone else), the librarian at the hospital, and the producer of a stream of brilliant book reviews which appeared in the hospital magazine every month. It was obvious to me, from my first meeting with Mr L. – and this impression was reinforced by all my subsequent meetings with him – that this was a man of most unusual intelligence, cultivation, and sophistication; a man who seemed to have an almost total recall for whatever he had read, thought, or experienced; and, not least, a man with an introspective and investigative passion which exceeded that of almost any patient I had ever seen. This combination of the profoundest disease with the acutest investigative intelligence made Mr L. an 'ideal' patient, so to speak, and in the six and a half years I have known him he has taught me more about Parkinsonism, post-encephalitic illness, suffering, and human nature than all the rest of my patients combined. Mr L. deserves a book to himself, but I must here confine myself to the barest and most inadequate outline of his state, before, during, and after the use of L-DOPA.

The picture which Mr L. presented in 1966 had not changed since his admission to the hospital, and indeed he himself – like so many other 'mummified' post-encephalitic patients – seemed a good deal younger than his chronological age: in particular he had the unlined face of a man in his twenties. He showed extreme rigidity of his neck, trunk, and limbs and marked dystrophic changes in his hands, which were no larger than those of a child; his face was profoundly masked, but when it broke into a smile the smile remained for minutes or hours – like the smile of the Cheshire Cat; he was totally voiceless except at times of unusual excitement when he could yell or bellow with considerable force. He suffered from frequent 'micro-crises' – upturnings of the eyeballs, associated with transient inability to move or respond; these lasted a few seconds only, and occurred dozens, and sometimes hundreds, of times a day. His eye movements, as he read, or glanced about his surroundings, were rapid and sure, and gave the only external clue to the alert and attentive intelligence imprisoned within his motionless body.

At the end of my first meeting with Leonard L. I said to him:

'What's it like being the way you are? What would you compare it to?' He spelt out the following answer: 'Caged. Deprived. Like Rilke's "Panther." '[93] And then he swept his eyes around the ward and spelt out: 'This is a human zoo.' Again and again, with his penetrating descriptions, his imaginative metaphors, or his great stock of poetic images, Mr L. would try to evoke the nature of his own being and experience. 'There's an awful presence,' he once tapped out, 'and an awful absence. The presence is a mixture of nagging and pushing and pressure, with being held back and constrained and stopped – I often call it "the goad and halter." The absence is a terrible isolation and coldness and shrinking – more than you can imagine, Dr Sacks, much more than anybody who isn't this way can possibly imagine – a bottomless darkness and unreality.' Mr L. was fond of tapping out, or voicelessly murmuring – in a sort of soliloquy – passages from Dante or T. S. Eliot, especially the lines:

> Descend lower, descend only
> Into the world of perpetual solitude,
> World not world, but that which is not world,
> Internal darkness, deprivation
> And destitution of all property,
> Desiccation of the world of sense,
> Inoperancy of the world of spirit . . .

'At other times,' Mr L. would tap out, 'there's none of this sense of pushing or active taking-away, but a sort of total calmless, a nothingness, which is by no means unpleasant. It's a let-up from the torture. On the other hand, it's something like death. At these times I feel I've been castrated by my illness, and relieved from all the longings other people have.' And when he was in *these*

[93] Sein Blick ist vom Vorübergehn der Stäbe
So müd geworden, dass er nichts mehr hält.
Ihm ist, als ob es tausend Stäbe gäbe
Und hinter tausend Stäben keine Welt.

(His gaze from going through the bars has grown so weary that it can take in nothing more. For him it is as though there were a thousand bars, and behind the thousand bars no world.)

moods Mr L. would think of Abelard, and would tap out or murmur:

> For thee the fates, severely kind, ordain
> A cool suspense from pleasure and from pain,
> Thy life a long, dead calm of fix'd repose;
> No pulse that riots, and no blood that glows.
> Still as the sea, 'ere winds were taught to blow,
> Or moving spirit bade the waters flow.

At other times, Mr L. would describe for me states of perception and being to which he was frequently prone, both in his waking and his dreaming states – states which I have elsewhere called dynamic vision, and kinematic-mosaic vision.[94] My knowledge of such states, as they occur in post-encephalitic patients, has been especially derived from Mr L., who is so articulate, and from other patients (particularly Hester Y. and Rose R. as well as other patients whose histories are not given here), who frequently experienced such states without having Mr L.'s passion and power to describe them.

It was only very gradually, over the following years, with Mr L.'s help and that of his devoted mother – who was continually with him – that I was able to form any adequate picture of his state of mind and being, and the way in which this had developed in the preceding years. Mr L. had shown precocity and withdrawal from his earliest years, and these had become much accentuated with the death of his father when he was six. By the age of ten he would often say: 'I want to spend my life reading and writing. I want to bury myself among books. One can't trust human beings in the least.' In his early adolescent years Leonard L. was indeed continually buried in books, and had few or no friends, and indulged in none of the sexual, social, or other activities common to boys of his age. At the age of fifteen his right hand started to become stiff, weak, pale, and shrunken: these symptoms – which were the first signs of his post-encephalitic disease – were interpreted by him as a punishment for masturbation and for blasphemous thoughts; he would often murmur to himself the words of the 137th psalm ('If I forget thee, O Jerusalem, let my right hand forget its cunning') and 'If thy right hand offend thee cut it off.' He was reinforced in these morbid phantasies by the attitude of his mother who also saw his illness as a punishment for sin (compare Maria G.). Despite the gradual spread and progression of his disability, Leonard L. was able to go to Harvard and to graduate with honours, and had almost finished a thesis for his Ph.D. – in his twenty-seventh year – when his disability become so severe as to bring his studies and activities to a total halt. After leaving Harvard, he spent three years at home; and at the age of thirty, almost totally petrified, he was admitted to Mount Carmel Hospital. On his admission he was at once given charge of the hospital library. He could do little but read, and he *did* nothing but read. He indeed became buried in books from this time on, and thus, in a sense, achieved a dreadful fulfilment of his childhood wish.

In the years before I gave him L-DOPA I had many conversations with Leonard L., conversations which were necessarily somewhat one-sided and cursory since he could only answer my questions by painfully tapping out answers on his spelling-board – and his answers tended to assume an abbreviated, telegraphic, and sometimes cryptic form. When I asked him how he felt he would usually tap out 'meek,' but he would also intimate that he sometimes had a sense of intense violence and power which was 'locked up' inside him, and which he experienced only in dreams. 'I have no exit,' he would tap out. 'I am trapped in myself. This stupid body is a prison with windows but no doors.' Although for much of the time, and in many ways, Mr L. hated himself, his disease, and the world, he also had a great and unusual capacity for love. This was especially apparent in his reading and his reviewing, which showed a vital, humorous, and at times Rabelaisian relish for the world. And it was sometimes evident in his reaction to himself when he would spell out: 'I am what I am. I am part of the world. My disease and deformity are part of the

[94] Such states may also occur in other intoxications induced by belladonna, LSD, etc., in psychoses, and especially during migraine attacks: see Ch. 3 in my book *Migraine*.

world. They are beautiful in a way like a dwarf or a toad. It's my destiny to be a sort of grotesque.'

There existed an intense and mutual dependence between Mr L. and his mother, who came to the hospital to look after him for ten hours a day – a looking-after which included attention to his most intimate physical needs. One could see, when his mother was changing his nappies or bib, a look of blissful baby-like contentment on Mr L.'s face, admixed with impotent resentment at his degraded, infantilized, and dependent state. His mother, similarly, showed and expressed a mixture of pleasure with her life-giving, loving, and mothering role, admixed with intense resentment at the way in which her life was being 'sacrificed' to her grown-up but helpless 'parasite' of a son. (Compare the relationship of Lucy K. and her mother.) Both Mr L. and his mother expressed uncertainty and ambivalence about the use of L-DOPA; both of them had read about it, but neither had actually seen its effects. Mr L. was the first patient in Mount Carmel whom I put on L-DOPA.

Course on L-DOPA

L-DOPA was started in early March 1969 and raised by degrees to 5.0 gm. a day. Little effect was seen for two weeks, and then a sudden 'conversion' took place. The rigidity vanished from all his limbs, and he felt filled with an access of energy and power; he became able to write and type once again, to rise from his chair, to walk with some assistance, and to speak in a loud and clear voice – none of which had been possible since his twenty-fifth year. In the latter part of March, Mr L. enjoyed a mobility, a health, and a happiness which he had not known in thirty years. Everything about him filled him with delight: he was like a man who had awoken from a nightmare or a serious illness, or a man released from entombment or prison, who is suddenly intoxicated with the sense and beauty of everything round him. During these two weeks, Mr L. was drunk on reality – on sensations and feelings and relations which had been cut off from him, or distorted, for many decades. He loved going out in the hospital

garden: he would touch the flowers and leaves with astonished delight, and sometimes kiss them or press them to his lips. He suddenly desired to see the night-city of New York, which (although so close to) he had not seen, or wanted to see, in twenty years: and on his return from these night-drives he was almost breathless with delight, as if New York were a jewel or the New Jerusalem. He read the 'Paradiso' now – during the previous twenty years he had never got beyond 'Inferno' or 'Purgatorio' – with tears of joy on his face: 'I feel saved,' he would say, 'resurrected, re-born. I feel a sense of health amounting to Grace . . . I feel like a man in love. I have broken through the barriers which cut me off from love.' The predominant feelings at this time were feelings of freedom, openness, and exchange with the world; of a lyrical appreciation of a real world, undistorted by phantasy, and suddenly revealed; of delight and satiety with self and the world – 'I have been hungry and yearning all my life,' said Mr L., 'and now I am full. Appeased. Satisfied. I want nothing more.' He experienced a vanishing of hostility, anxiety, tensions, and meanness – and in their place felt a sense of ease, of harmony and safety, of friendship and kinship with everything and everyone which he had never in his life experienced before – 'not even before the Parkinsonism,' as he was the first to admit. The diary which he started to keep at this time was full of expressions of amazement and gratitude. *'Exaltavit humiles!'* he wrote on each page: and other exclamations like 'For *this* it was worth it, my life of disease,' 'L-DOPA is a *blessed* drug, it has given me back the possibility of life. It has opened me out where I was clammed tight-shut before,' and 'If everyone felt as good as I do, nobody would think of quarrelling or wars. Nobody would think of domination or possession. They would simply enjoy themselves and each other. They would realize that Heaven was right here down on earth.'

In April, intimations of trouble appeared. Mr L.'s abundance of health and energy – of 'grace' as he called it – became *too* abundant and started to assume an extravagant, maniacal and grandiose form; at the same time a variety of odd movements and other phenomena made their initial appearance. His sense of harmony and ease and effortless control was replaced by a sense

of *too-muchness,* of force and pressure, and a pulling-apart – a pathological driving and fragmentation which increased, obviously and visibly, with each passing day. Mr L. passed from his sense of delight with existing reality, to a peremptory sense of mission and fate: he started to feel himself a Messiah, or the Son of God; he now 'saw' that the world was 'polluted' with innumerable devils, and that he – Leonard L. – had been 'called on' to do battle with them. He wrote in his diary: 'I have Risen. I am still Rising. From the Ashes of Defeat to the Glory of Greatness. *Now* I must Go Out and Speak to the World.' He started to address groups of patients in the corridors of the hospital; to write a flood of letters to newspapers, congressmen, and the White House itself;[95] and he implored us to set up a sort of evangelical lecture-tour, so that he could exhibit himself all over the States, and proclaim the Gospel of Life according to L-DOPA.

Where, in April, he had had a marvellous sense of ease and satisfaction he now became uneasy and dissatisfied, and increasingly filled with painful, unsatisfiable appetites and desires. His hungers became transmogrified into insatiable passions and greeds. He ascended to heights of longing and phantasy which no reality could have met – least of all the grim and confining reality of a Total Institution, an asylum for the dilapidated and dying,[96] or – as he himself had described it three years earlier – a 'human zoo.' The most intense and the most thwarted of these yearnings were of a sexual nature, allied with desires for power and possession. No longer satisfied with the pastoral and innocent kissing of flowers, he wanted to touch and kiss all the nurses on the ward – and in his attempts to do so was rebuffed, at first with smiles and jokes and good humour, and then with increasing asperity and anger. Very rapidly, in May, relationships became strained, and Mr L. passed from a gentle amorousness to an

[95] Mr L. never actually sent out any of these letters, and spoke with irony of himself as 'a Parkinsonian Herzog.'

[96] The hospital was, in fact, originally called 'The Mount Carmel Home for the Crippled and Dying,' and despite having changed its lugubrious name, necessarily retained some of its original character.

enraged and thwarted erotomania.[97] Early in May he asked me if I could arrange for various nurses and nursing aides to 'service' him at night, and suggested – as an alternative – that a brothel-service be set up to meet the needs and the hungers of DOPA-charged patients.

By mid-May, Mr L. had become thoroughly 'charged up,' in his own words, 'charged and super-charged' with a great surplus, a great *pressure,* of libidinous and aggressive feelings, with an avidity and voracity which could take many forms. In his phantasies, in his notebooks, and in his dreams, his image of himself was no longer that of the meek and mild and melancholy one, but of a burly caveman equipped with an invincible club and an invincible phallus; a Dionysiac god packed with virility and power; a wild, wonderful, ravening man-beast who combined kingly, artistic, and genital omnipotence. 'With L-DOPA in my blood,' he wrote at this time, 'there's nothing in the world I can't do if I want. L-DOPA is power and irresistible force. L-DOPA is wanton, egotistical power. L-DOPA has given me the power I craved. I have been waiting for L-DOPA for the

[97] Such a suppression of sexuality, indeed, is all too common in asylums and institutions, and could have serious repercussions even in patients who were in a less extreme position than Leonard L. Two post-encephalitic patients, Maurice P. and Ed M., were both admitted in the same week in 1971. Both were relatively young, still in their forties, both had been married, both had recently been divorced by their wives. Both were overwhelmed by the calamity of events, and – like Miron V. – immediately became psychotic on admission. Both were placed on L-DOPA, and went through the spectacular drama of 'awakening' and 'tribulation.' But here their stories diverged completely. Ed achieved a clean separation, marked by affectionate understanding and lack of neurosis; liberated by this, remobilized and re-energized by L-DOPA, he found a happy sexual relationship outside the hospital, and a subsequent happy marriage inside the hospital. Finding love, finding work (he discovered a talent for drawing, and soon became the hospital artist), finding *himself,* he found 'accommodation' of a most spacious kind, and has held it now for more than eight years, despite the severest post-encephalitic disease. Maurice, unhappily, though also a man of charm and parts, never achieved a clean separation from his wife; the two remain linked in obsessive mutual torture. Neither has he found work or friends. He is not 'permitted' any 'accommodation,' any freedom, and remains trapped in a torturing sexual neurosis, punctuated by bouts of violent masturbation and near-rape. At such times, like Leonard, he cries, 'Take away the DOPA – I'd sooner be dead than tortured like this.'

past thirty years.'[98] Driven at this time by libidinal force, he started to masturbate – fiercely, freely, and with little concealment – for hours each day. At times his voracity took other forms – hunger and thirst, and licking and lapping, biting and chewing, and sucking his tongue – all of which stimulated him and yielded something very similar to sexual pleasure (compare Margaret A., Rolando P., Maria G., *et al.*).

Coinciding with this surge of general excitement, Mr L. showed innumerable 'awakenings' and specific excitements – particular forms of urge and push, repetition, compulsion, suggestion, and perseveration. He started to talk with great speed, and to repeat words and phrases again and again (palilalia). He continually seized and held different objects with his eyes, and would be unable to relinquish his gaze voluntarily. He showed urges to pant and to clap his hands, and once he had started to do either of these he was unable to stop, but proceeded with continually increasing violence and speed until a sort of clench or freezing set in: these frenzied crescendos – a catatonic equivalent of Parkinsonian hurry and festination – yielded 'a surge of excitement, just like an orgasm.' In the latter half of May, reading became difficult because of uncontrollable hurry and perseveration: once he had started to read he would read faster and faster without regard for the sense or syntax, and unable to stop this festinant reading he would have to shut the book with a snap after each sentence or paragraph, so that he could digest its sense before rushing ahead. Tics appeared at this time, and grew more numerous daily: sudden impulsions and tics of the eyes, grimaces, cluckings, and lightning-quick scratchings. Finding himself distracted and decomposed by this increasing furor and fragmentation, Mr L. made his final effort at control, and decided – at the start of June – on an act of supreme coherence and catharsis – the writing of an autobiography: 'It'll bring me together,' he said; 'it'll cast out the devils. It'll bring everything into the full light of day.'

Using his shrunken, dystrophic index-fingers, Mr L. typed out an autobiography 50,000 words in length, in the first three weeks

[98] Compare the sentiments expressed by Freud about cocaine quoted in the Appendix: 'Miracle' Drugs: Freud, William James, and Havelock Ellis, p. 323.

of June.[99] He typed almost ceaselessly – twelve or fifteen hours a day, and *when* he typed he indeed 'came together,' and found himself free from his tics and distractions, from the pressures which were driving and shivering his being; when he left the typewriter, the frantic, driven, ticcing palilalia would immediately assert its hegemony again.

During this writing, Mr L. felt a returning sense of strength and freedom, and a need of absolute solitude and concentration. He said to his mother at this time: 'Why don't you take off for a week or a month, go to Florida maybe – you could do with a rest. I'm independent now – I won't need you so much. I can do everything I want for myself right now.' His mother was greatly disturbed by these sentiments, and now showed how much *she* was in need of their relationship of symbiosis and dependence. She became greatly agitated, and came to me and to others several times at this period, saying that we had 'taken away' her son, and that she couldn't go on unless he were 'restored' to her: 'I can't bear Len, the way he is at the moment,' she said, 'the way he's so active and full of decision. He has pushed me away. He only thinks of himself. I need to be needed – it's the main need I have. Len's been my baby for the last thirty years, and you've taken him away with your darned El-Dopey!'[100]

In the last week of June, and throughout July, Mr L. returned

[99] Mr L.'s autobiography is a remarkable document, unique of its kind. Its style and content clearly show the conflicts which were raging in Mr L. at this time. For the most part, he shows an extraordinary humour, detachment, and passion for accuracy, and provides penetrating and moving descriptions of his early years, the development of his illness, and his reactions to this, his fellow patients at the home they all shared, his reactions to L-DOPA, his feeling towards the drug, towards me, and towards others. It is *also* interlarded with waves and floods of sexual phantasy, jokes, pseudo-reminiscences, etc., which would rise up and engulf him from time to time; some of these are conflated with carnivorous and cannibalistic phantasies, with thoughts of raw meat to satisfy his needs.

[100] Mrs L.'s attitude was not uncommon among relatives of our invalid patients. The restoration of activity and independence was by no means always welcomed by some of these relatives, and was sometimes passively or actively opposed. Some of these relatives had built their own lives around the illnesses of the patients, and – unconsciously, at least – did everything they could to reinforce the illness and dependence ensuing. One sees such social and familial reinforcement of illness in neurotic and schizophrenic families, of course, and quite commonly also in migrainous families.

to his violently frenzied and fragmented state, and now this passed beyond all bounds of control, and brought into action ultimate physiological safeguards which in themselves were highly distressing or disabling.

His sexual and hostile phantasies now assumed hallucinatory form, and he had frequent voluptuous and demoniac visions, and erotic dreams and nightmares each night.

At first, Mr L. ingeniously controlled these hallucinations by confining them to the blank screen of his television set or a picture which hung on the wall opposite his bed. The latter – an old picture of a Western shanty-town – would 'come to life' when Mr L. gazed at it; cowboys on horses would gallop through the streets, and voluptuous whores would emerge from the bars. The screen of the television set was 'reserved' for the production of grinning and leering demoniac faces. Later in July, this 'controlled' hallucinosis (which had some analogies to that of Martha N. and Gertie C.) broke down, and his hallucinations 'escaped' from the picture and screen, and spread irresistibly in his whole mind and being.[101] His tics, his palilalia, his frenzies increased.

[101] Leonard L. had, in fact, been hallucinating for years – long before he ever received L-DOPA (although he was unable or unwilling to admit this to me until 1969). Being particularly fond of 'Western' scenes and films, Leonard L. had, indeed, ordered the old painting of the shanty-town as long ago as 1955 *for the sole and express purpose of hallucinating with it* – and it was his custom to 'animate' it for a hallucinatory matinée after lunch every day. It was only when he was maddened by L-DOPA that this chronic (and comic) and benign hallucinosis escaped from his will and imaginative control, and assumed a frankly psychotic character.

Those who hallucinate are, not unnaturally, usually reticent about their 'visions' and 'voices,' etc., for fear that they will be regarded as eccentric or mad; and this was equally true of the large population of post-encephalitic patients resident at Mount Carmel. Moreover these patients also had, of course, very great physical difficulties in communication. It has taken many years for these patients to trust me, to *entrust* me with some of their most intimate experiences and feelings; and thus it is only *now* (in 1974), after we have known each other for almost a decade, that I find myself in a position to make a double observation: first, that at least a third, and possibly a majority, of the deeply disabled and longest-institutionalized patients are 'chronic hallucinators'; and secondly, that in most cases it would be quite incorrect to use the term 'schizophrenic' of either the patients or their hallucinations. My reasons for saying this are, in essence, as follows: that most of the patients' hallucinations lack the ambivalent, often paranoiac, and in general uncontrollable nature of schizophrenic hallucinations; but that they are, in contrast, very like scenes of normal life, very much like that healthy reality from which these pathetic patients have been cut off for years (by illness, institutionalization, isolation, etc.). The function (and form) of schizophrenic hallucinations, in general, has to do with the *denial of reality;* whereas the function (and form) of the benign hallucinations seen in Mount Carmel has to do with *creating reality,* imagining a full and happy and healthy life of a sort which has been cruelly denied to them through Fate. Thus I regard it as a sign of these patients' health, of their enduring wish to live, and live fully – if only in the realms of imagination and hallucination, which are the only realms where they still enjoy freedom – that they hallucinate all the richness and drama and fullness of life. They hallucinate to *survive* – as do subjects exposed to extreme sensory, motor, or social isolation; and for this reason, whenever I learn from such a patient that he constructs a rich and benign hallucinatory 'life,' I encourage him to the full, as I encourage all creative endeavours which reach out to life.

His speech became broken by sudden intrusions and cross-associations of thought, and by repeated punning and clanging and rhyming. He started to experience forms of motor and thought 'blocking' very similar to those of Rose R. and Margaret A.: at such times he would suddenly call out, 'Dr Sacks! Dr Sacks! I want . . .', but be unable to complete what he wished to say; the same block was also manifest in his letters to me, which were full of violent, exclamatory starts (usually my name, followed by two or three words – in one such letter, impotently repeated twenty-three times) followed by sudden haltings and blocks. And in his walking and movements such blocks were apparent, which suddenly arrested him in mid-motor stream: he seemed, at such times, to be in collision with an invisible wall.

This period also saw the onset and progress of rapid exhaustions or reversals of response – an up-or-down or 'yo-yo' reaction essentially similar to those shown by Hester Y., Margaret A., Maria G., Rolando P., and many of our other most severely affected patients. At such times, Mr L. would pass within minutes (and as his oscillations grew more severe, within seconds) from an intensely aroused and excited state to one of profound exhaustion, associated with severe recrudescence of Parkinsonian and catatonic immobility and rigidity. These switches (of reaction between agitated-manic-ticcy-akathisia and exhausted-depressed-Parkinsonian-akinesia) took place with continually increasing frequency and suddenness – at first related to the times of L-DOPA administration, and controllable to some extent by the times and

the dosage: but then 'spontaneously,' without any reference to dosage or times. During this period his total daily intake of L-DOPA was reduced from 5 gm. to 0.75 gm. a day, without making the least difference to his pattern of reaction; at this time also we followed the Cotzias schedule of giving him his L-DOPA in small frequent doses – we even tried him on hourly doses of the drug; but this also made no difference to his rapid and violent oscillations of response. All his reactions had become all-or-none. The 'middle-ground' of health, temper, harmony, moderation had almost entirely disappeared at this time, and Mr L. became completely 'decomposed' into pathological immoderations of every sort.

We could only guess at the relative importance of various determinants in this catastrophic reaction – the possibility of L-DOPA accumulating within him; a 'functional' conflagration, whereby one form of excitement led to another; the inevitability of exhaustions or 'crashes' given such stimulation; the lack of real absorbing occupation, or effective catharsis, with the finishing of his book; the deteriorating relationship between him and the nursing staff; or the implicit (if not explicit) demand by his mother for him to be sick and dependent, and her disapproval or 'veto' of any improvement. It seemed likely that *all* of these factors – as well as others which we could not formulate – were playing some part in determining his reactions.

The closing scene of this so-mixed summer was precipitated by institutional disapproval of Mr L.'s ravening libido, the threats and condemnations which this brought down on him, and his final, cruel removal to a 'punishment cell' – a tiny three-bedded room containing two dying and dilapidated terminal dements. Deprived of his own room and all his belongings, deprived of his identity and status in our post-encephalitic community, degraded to the physical and moral depths of the hospital, Mr L. fell into suicidal depression and infernal psychosis.[102]

[102] I thought at this time, and still think, that among the important non-pharmacological determinants of the reactions of these patients to L-DOPA – and especially the form and severity of their 'side-effects' after a period of enormous improvement – the repressive and censorious character of the institution they found themselves in played a considerable part. In particular, the hospital administration frowned upon any manifestations of sexuality among the inmates and often treated this with an irrational and cruel severity. Leonard L., Rolando P., Frank G. and many other patients were, I think, driven at times into depressive or paranoid psychoses by the combination of a DOPA-induced libidinous arousal and its frustration or punishment by the conditions and policies of institutional life. If, as Mr L. suggested, some mode of sexual release had been provided or permitted, the effects of L-DOPA might – perhaps – have been less malignant.

A further factor, which doubtless added to Mr L.'s sexual drives and their guilty moral recoil, was the too-close relation between him and his mother. His mother – who, in a sense, was herself in love with her son, as he was with her – became indignant and jealous of Mr L.'s new thoughts: 'It's ridiculous,' she spluttered. 'A grown man like him! He was so *nice minded* before – never spoke about sex, never looked at girls, never seemed to think about the matter at all . . . I have sacrificed my life for Len: I am the one he should constantly think of; but now all he thinks of is those *girls!*' On two occasions, Mr L.'s thwarted sexuality became incestuous in direction, which outraged (but also titillated) his ambivalent mother. Once she confided to me that 'Len was trying to *paw* me today; he made the most horrible suggestions. *He said the worst thing in the world* – Bless him,' and she blushed and giggled as she said this to me.

During this dreadful period at the close of July, Mr L. became obsessed with notions of torture, death, and castration. He felt the room was a network of 'snares'; that there were 'ropes' in his belly which were trying to strangle him; that a gibbet had been set up, outside his room, for his impending and deserved execution for 'sin.' He felt that he was going to burst open, and that the world was coming to an end. He twice injured his penis, and once tried to suffocate himself by burying his head in his pillow.

We stopped his L-DOPA towards the end of July. His psychoses and tics continued for another three days, of their own momentum, and then suddenly came to a stop. Mr L. reverted during August to his original motionless state.

During August he scarcely moved or spoke at all – he had been returned to his original room – but reflected deeply on the preceding few weeks. In September he 'opened up' again to me, tapping his thoughts on his original letter-board. 'The summer was great and extraordinary,' he said (paraphrasing, as he was prone to, a poem of Rilke's),[103] 'but whatever happened then will not happen again. I thought I could make a life and a place for myself. I failed, and now I am content to be as I am; a *little*

[103] Der Sommer war sehr gros.
Wer jetzt kein Haus hat, baut sich keines mehr.

better perhaps, but no more of – all that.' At his request, then, I restarted Mr L. on L-DOPA in September 1969. He now showed the most extraordinary sensitivity to it – reacting strongly to a total dose of 50 mg. a day, where he had originally required 5,000 mg. a day. His response now was *entirely* pathological; he showed not a trace of therapeutic response, simply tics and tension and blocking of thought. 'You see,' he said afterwards, 'I told you so. You will never see anything like April again.'

In the past three years I have, in place of L-DOPA, repeatedly tried the use of amantadine, a drug with effects somewhat similar to, but milder than those of L-DOPA. I have given him amantadine eleven times in all. His reaction to this initially was very favourable, though lacking the intensity of the effects of L-DOPA. For almost ten weeks in the autumn of 1969 Mr L. was able to speak and move with some facility on amantadine without too much in the way of 'side-effects'; but towards the end of the year his reactions to amantadine became more pathological, the therapeutic reaction being displaced by a return to Parkinsonism and 'block,' on the one hand, and an accession of tics and restlessness, on the other. With each succeeding use of amantadine the therapeutic effects became less marked and shorter in duration, and the pathological effects more marked. On his eleventh and final trial of amantadine in March 1972, Mr L. showed only pathological reactions to this. He said at this time, 'This is the end of the line. I have *had* it with drugs. There is no more you can do with me.'

Since this final, futile trial of amantadine, Mr L. has recovered his 'cool' and composure. He has, apparently, conquered his hopes and regrets, the violent feeling of promise and threat, which drugs thrust on him for more than three years. He has, finally, assimilated the entire mixed experience, and used his strength and intelligence to accommodate to it. 'At first, Dr Sacks,' he recently said, 'I thought L-DOPA was the most wonderful thing in the world, and I blessed you for giving me the Elixir of Life. Then, when everything went bad, I thought it was the worst thing in the world, a deathly poison, a drug which sent one down to the depths of hell; and I cursed you for giving it to me. I was terribly mixed in my feelings between fear and hope, and

hatred and love . . . Now I accept the whole situation. It was wonderful, terrible, dramatic, and comic. It is finally – *sad,* and that's all there is to it. I'm best left alone – no more drugs. I've learned a great deal in the last three years. I've broken through barriers which I had all my life. And now, I'll stay myself, and you can keep your L-DOPA.'