

ROSE R.

Miss R. was born in New York City in 1905, the youngest child of a large, wealthy, and talented family. Her childhood and school days were free of serious illness, and were marked, from their earliest days, by love of merriment, games, and jokes. High-spirited, talented, full of interests and hobbies, sustained by deep family affection and love, and a sure sense of who and what and why she was, Miss R. steered clear of significant neurotic problems or 'identity-crises' in her growing-up period.

On leaving school, Miss R. threw herself ardently into a social and peripatetic life. Aeroplanes, above all, appealed to her eager, voliant, and irrepressible spirit; she flew to Pittsburgh and Denver, New Orleans and Chicago, and twice to the California of Hearst and Hollywood (no mean feat in the planes of those days). She went to innumerable parties and shows, was toasted and fêted, and rolled home drunk at night. And between parties and flights she dashed off sketches of the bridges and waterfronts with which New York abounded. Between 1922 and 1926, Miss R. lived in the blaze of her own vitality, and lived more than most other people in the whole of their lives. And this was as well, for at the age of twenty-one she was suddenly struck down by a virulent form of *encephalitis lethargica* – one of its last victims before the epidemic vanished. 1926, then, was the last year in which Miss R. really lived.

The night of the sleeping-sickness, and the days which followed it, can be reconstructed in great detail from Miss R.'s relatives, and Miss R. herself. The acute phase announced itself (as sometimes happened: compare Maria G.) by nightmares of a grotesque and terrifying and premonitory nature. Miss R. had a series of dreams about one central theme: she dreamed she was imprisoned in an inaccessible castle, but the castle had the form

and shape of herself; she dreamed of enchantments, bewitchments, entrancements; she dreamed that she had become a living, sentient statue of stone; she dreamed that the world had come to a stop; she dreamed that she had fallen into a sleep so deep that nothing could wake her; she dreamed of a death which was different from death. Her family had difficulty waking her the next morning, and when she awoke there was intense consternation: 'Rose,' they cried 'wake up! What's the matter? Your expression, your position . . . You're so still and so strange.' Miss R. could not answer, but turned her eyes to the wardrobe-mirror, and there she saw that her dreams had come true. The local doctor was brisk and unhelpful: 'Catatonia,' he said; '*Flexibilitas cerea*. What can you expect with the life she's been leading? She's broken her heart over one of these bums. Keep her quiet and feed her – she'll be fine in a week.'

But Miss R. was not to recover for a week, or a year, or forty-three years. She recovered the ability to speak in short sentences, or to make sudden movements before she froze up again. She showed, increasingly, a forced retraction of her neck and her eyes – a state of almost continuous oculogyric crisis, broken only by sleep, meals, and occasional 'releases.' She was alert, and seemed to notice what went on around her; she lost none of her affection for her numerous family – and they lost none of their affection for her; but she seemed absorbed and preoccupied in some unimaginable state. For the most part, she showed no sign of distress, and no sign of anything save intense *concentration*: 'She looked,' said one of her sisters, 'as if she were trying her hardest to remember something – or, maybe, doing her damndest to forget something. Whatever it was, it took all her attention.' In her years at home, and subsequently in hospital, her family did their utmost to penetrate this absorption, to learn what was going on with their beloved 'kid' sister. With them – and, much later, with me – Miss R. was exceedingly candid, but whatever she said seemed cryptic and gnomic, and yet at the same time disquietingly clear.³⁴

³⁴ I would often ask Miss R. what she was thinking about. 'Nothing, just nothing,' she would say.

When there was only this state, and no other problems, Miss R.'s family could keep her at home: she was no trouble, they loved her, she was simply – elsewhere (or nowhere). But three or four years after her trance-state had started, she started to become rigid on the left side of her body, to lose her balance when walking, and to develop other signs of Parkinsonism. Gradually these symptoms grew worse and worse, until full-time nursing became a necessity. Her siblings left home, and her parents were ageing, and it was increasingly difficult to keep her at home. Finally, in 1935, she was admitted to Mount Carmel.

Her state changed little after the age of thirty, and when I first

'But how can you possibly be thinking of nothing?'

'It's dead easy, once you know how.'

'How exactly do you think about nothing?'

'One way is to think about the same thing again and again. Like $2 = 2 = 2$; or, I am what I am what I am. . . . It's the same thing with my posture. My posture continually leads to itself. Whatever I do or whatever I think leads deeper and deeper into itself. . . . And then there are maps.'

'Maps? What do you mean?'

'Everything I do is a map of itself, everything I do is a part of itself. Every part leads into itself. . . . I've got a thought in my mind, and then I see something in it, like a dot on the skyline. It comes nearer and nearer, and then I see what it is – it's just the same thought I was thinking before. And then I see another dot, and another, and so on. . . . Or I think of a map, then a map of that map; then a map of that map of that map, and each map perfect, though smaller and smaller. . . . Worlds within worlds within worlds. . . . Once I get going I can't possibly stop. It's like being caught between mirrors, or echoes, or something. Or being caught on a merry-go-round which won't come to a stop.'

Sometimes, Miss R. told me, she would feel compelled to circumscribe the sides of a mental quadrangle, to seven notes of an endlessly-reiterated Verdi aria: '*Tum - ti-tum - ti-tum - ti-tum*,' a forced mental perambulation which might go on for hours or days. And at other times she would be forced to 'travel,' mentally, through an endless 3-D tunnel of intersecting lines, the end of the tunnel rushing towards her but never reached.

'And do you have any *other* ways of thinking about nothing, Rosie?'

'Oh yes! The dots and maps are *positive* nothings, but I also think of *negative* nothings.'

'And what are those like?'

'That's impossible to say, because they're takings-away. I think of a thought, and it's suddenly gone – like having a picture whipped out of its frame. Or I try to picture something in my mind, but the picture dissolves as fast as I can make it. I have a particular idea, but can't keep it in mind; and then I lose the *general* idea; and then the *general* idea of a general idea; and in two or three jumps my mind is a blank – *all* my thoughts gone, blanked out or erased.'

saw her in 1966, my findings coincided with the original notes from her admission. Indeed, the old staff-nurse on her ward, who had known her throughout, said: 'It's uncanny, that woman hasn't aged a day in the thirty years I've known her. The rest of us get older – but Rosie's the same.' It was true: Miss R. at sixty-one looked thirty years younger; she had raven-black hair, and her face was unlined, as if she had been magically preserved by her trance or her stupor.

She sat upright and motionless in her wheelchair, with little or no spontaneous movement for hours on end. There was no spontaneous blinking, and her eyes stared straight ahead, seemingly indifferent to her environment but completely absorbed. Her gaze, when requested to look in different directions, was full, save for complete inability to converge the eyes. Fixation of gaze lacked smooth and subtle modulation, and was accomplished by sudden, gross movements which seemed to cost her considerable effort. Her face was completely masked and expressionless. The tongue could not be protruded beyond the lip-margins, and its movements, on request, were exceedingly slow and small. Her voice was virtually inaudible, though Miss R. could whisper quite well with considerable effort. Drooling was profuse, saturating a cloth bib within an hour, and the entire skin was oily, sebaceous, and sweating intensely. Akinesia was global, although rigidity and dystonia were strikingly unilateral in distribution. There was intense axial rigidity, no movement of the neck or trunk muscles being possible. There was equally intense rigidity in the left arm, and a very severe dystonic contracture of the left hand. No voluntary movement of this limb was possible. The right arm was much less rigid, but showed great akinesia, all movements being minimal, and decaying to zero after two or three repetitions. Both legs were hypertonic, the left much more so. The left foot was bent inwards in dystonic inversion. Miss R. could not rise to her feet unaided, but when assisted to do so could maintain her balance and take a few small, shuffling, precarious steps, although the tendency to backward-falling and pulsion was very great.

She was in a state of near-continuous oculogyric crisis, although this varied a good deal in severity. When it became more

severe, her Parkinsonian 'background' was increased in intensity, and an intermittent coarse tremor appeared in her right arm. Prominent tremor of the head, lips, and tongue also became evident at these times, and rhythmic movement of buccinators and corrugators. Her breathing would become somewhat stertorous at such times, and would be accompanied by a guttural phonation reminiscent of a pig grunting. Severe crises would always be accompanied by tachycardia and hypertension. Her neck would be thrown back in an intense and sometimes agonizing opisthotonic posture. Her eyes would generally stare directly ahead, and could not be moved by voluntary effort: in the severest crises they were forced upwards and fixed on the ceiling.

Miss R.'s capacity to speak or move, minimal at the best of times, would disappear almost entirely during her severest crises, although in her greatest extremity she would sometimes call out, in a strange high-pitched voice, perseverative and palilalic, utterly unlike her husky 'normal' whisper: 'Doctor, doctor, doctor, doctor... help me, help, help, h'lp, h'lp... I am in terrible pain, I'm so frightened, so frightened, so frightened... I'm going to die, I know it, I know it, I know it...'. And at other times, if nobody was near, she would whimper softly to herself, like some small animal caught in a trap. The nature of Miss R.'s pain during her crises was only elucidated later, when speech had become easy: some of it was a local pain associated with extreme opisthotonos, but a large component seemed to be central – diffuse, unlocalizable, of sudden onset and offset, and inseparably coalesced with feelings of dread and threat, in the severest crises a true *angor animi*. During exceptionally severe attacks, Miss R.'s face would become flushed, her eyes reddened and protruding, and she would repeat, 'I'll kill me, it'll kill me, it'll kill me...'. hundreds of times in succession.⁵⁵

⁵⁵ Compare cases cited by Jelliffe: the patient who would cry out in 'anguish' during her attacks, but could give no reason for her fear, or the patient who would feel every attack to be 'a calamity' (see Jelliffe, 1932, pp. 36–42). The same term was often used by Lillian W., especially in relation to those very complex oculogyric crises which she sometimes called 'humdingers' (see p. 19). Even though she had oculogyric crises every week, she would invariably say during each attack, 'This is the worst one I ever had. The others were just bad – *this* is a calamity'. When I would remonstrate, 'But Mrs. W., this is exactly what

Miss R.'s state scarcely changed between 1966 and 1969, and when L-DOPA became available I was in two minds about using it. She was, it was true, intensely disabled, and had been virtually helpless for over forty years. It was her *strangeness* above all which made me hesitate and wonder – fearing what might happen if I gave her L-DOPA. I had never seen a patient whose regard was so turned away from the world, and so immured in a private, inaccessible world of her own.

I kept thinking of something Joyce wrote about his mad daughter: '... fervently as I desire her cure, I ask myself what then will happen when and if she finally withdraws her regard from the lightning-lit reverie of her clairvoyance and turns it upon that battered cabman's face, the world...'

Course on L-DOPA

But I started her on L-DOPA, despite my misgivings, on 18 June 1969. The following is an extract from my diary.

25 June. The first therapeutic responses have already occurred, even though the dosage has only been raised to 1.5 gm. a day. Miss R. has experienced two entire days unprecedentedly free of oculogyric crises, and her eyes, so still and preoccupied before, are brighter and more mobile and attentive to her surroundings. 1 July. Very real improvements are evident by this date: Miss R. is able to walk unaided down the passage, shows a distinct reduction of rigidity in the left arm and elsewhere, and has become able to speak at a normal conversational volume. Her mood is cheerful, and she has had no oculogyric crises for three days. In view of this propitious response, and the absence of any adverse effects, I am increasing the dosage of L-DOPA to 4 gm. daily.

6 July. Now receiving 4 gm. L-DOPA. Miss R. has continued to improve in almost every way. When I saw her at lunchtime, she was delighted with everything: 'Dr Sacks!' she called out, 'I

you said last week! she would say, 'I know. I was wrong. This one is a calamity.' She never got used to her crises in the least – even though she had had them, each Wednesday, for more than forty years.

walked to and from the new building today' (this is a distance of about six hundred yards). 'It's fabulous, it's gorgeous!' Miss R. has now been free from oculogyric crises for eight days, and has shown no akathisia or undue excitement. I too feel delighted at her progress, but for some reason am conscious of obscure forebodings.

7 July. Today Miss R. has shown her first signs of unstable and abrupt responses to L-DOPA. Seeing her 3½ hours after her early-morning dose, I was shocked to find her very 'down' – hypophonic, somewhat depressed, rigid and akinetie, with extremely small pupils and profuse salivation. Fifteen minutes after receiving her medication she was 'up' again – her voice and walking fully restored, cheerful, smiling, talkative, her eyes alert and shining, and her pupils somewhat dilated. I was further disquieted by observing an occasional impulsion to run, although this was easily checked by her.

8 July. Following an insomniac night ('I didn't feel in the least sleepy: thoughts just kept rushing through my head'), Miss R. is extremely active, cheerful and affectionate. She seems to be very busy, constantly flying from one place to another, and all her thoughts too are concerned with movement. 'Dr Sacks,' she exclaimed breathlessly, 'I feel great today. I feel I want to fly. I love you, Dr Sacks, I love you, I love you. You know, you're the kindest doctor in the world... You know I always liked to travel around: I used to fly to Pittsburgh, Chicago, Miami, California... etc. Her skin is warm and flushed, her pupils are again very widely dilated, and her eyes constantly glancing to and fro. Her energy seems limitless and uniting, although I get the impression of exhaustion somewhere beneath the pressured surface. An entirely new symptom has also appeared today, a sudden quick movement of the right hand to the chin, which is repeated two or three times an hour. When I questioned Miss R. about this she said: 'It's new, it's odd, it's strange, I never did it before. God knows why I do it. I just suddenly get an *urge*, like you suddenly got to sneeze or scratch yourself.' Fearing the onset of akathisia or excessive emotional excitement, I have reduced the dosage of L-DOPA to 3 gm. daily.

9 July. Today Miss R.'s energy and excitement are unabated, but her mood has veered from elation to anxiety. She is impa-

tient, touchy, and extremely demanding. She became much agitated in the middle of the day, asserting that seven dresses had been stolen from her closet, and that her purse had been stolen. She entertained dark suspicions of various fellow patients: no doubt they had been plotting this for weeks before. Later in the day, she discovered that her dresses were in fact in her closet in their usual position. Her paranoid recriminations instantly vanished. 'Wow!' she said, 'I must have imagined it all. I guess I better take myself in hand.'

14 July. Following the excitements and changing moods of 9 July, Miss R.'s state has become less pressured and hyper-active. She has been able to sleep, and has lost the tic-like 'wiping' movements of her right hand. Unfortunately, after a two-week remission, her old enemy has re-emerged, and she has experienced two severe oculogyric crises. I observed in these not only the usual staring, but a more bizarre symptom – capivation or enthrallment of gaze: in one of these crises she had been forced to stare at one of her fellow-patients, and had felt her eyes 'drawn' this way and that, following the movements of this patient around the ward. 'It was uncanny,' Miss R. said later. 'My eyes were spellbound. I felt like I was bewitched or something, like a rabbit with a snake.' During the periods of 'bewitchment' or fascination, Miss R. had the feeling that her 'thoughts had stopped,' and that she could only think of one thing, the object of her gaze. If, on the other hand, her attention was distracted, the quality of thinking would suddenly change, the motionless fascination would be broken up, and she would experience instead 'an absolute torrent of thoughts,' rushing through her mind: these thoughts did not seem to be 'her' thoughts, they were not what she wanted to think, they were 'peculiar thoughts' which appeared 'by themselves.' Miss R. could not or would not specify the nature of these intrusive thoughts, but she was greatly frightened by the whole business: 'These crises are different from the ones I used to get,' she said. 'They are worse. They are completely *mad*!'⁵⁶

⁵⁶ Jelliffe cites many cases of oculogyric crises with fixation of gaze and attention, and also of crises with reiterative 'autochthonous' thinking. Miss R. never 'outsafed' the nature of the 'mad' thoughts which came to her during her crises at this time, and one would suspect from the reticence that these thoughts were of

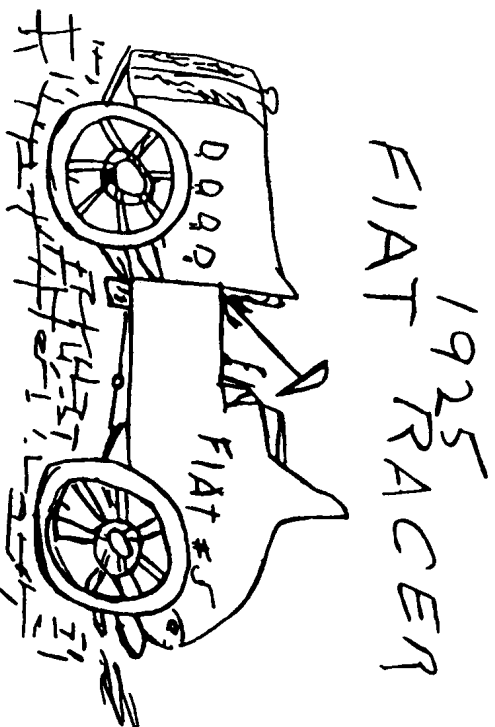
25 July. Miss R. has had an astonishing ten days, and has shown phenomena I never thought possible. Her mood has been joyous and elated, and very salacious. Her social behaviour has remained impeccable, but she has developed an insatiable urge to sing songs and tell jokes, and has made very full use of our portable tape-recorder. In the past few days, she has recorded innumerable songs of an astonishing lewdness, and reams of 'light' verse all dating from the twenties. She is also full of anecdotes and allusions to 'current' figures – to figures who were current in the mid-1920s. We have been forced to do some archival research, looking at old newspaper-files in the New York Library. We have found that almost all of Miss R.'s allusions date to 1926, her last year of real life before her illness closed round her. Her memory is uncanny, considering she is speaking of so long ago. Miss R. wants the tape-recorder, and nobody around; she stays in her room, alone with the tape-recorder; she is looking at everyone as if they didn't exist. She is completely engrossed in her memories of the twenties, and is doing her best to not notice anything later. I suppose one calls this 'forced reminiscence,' or incontinent nostalgia.⁵⁷ But I also have the feeling that

an inadmissible nature, either sexual or hostile. Jelliffe refers to several patients who were compelled to think of 'dirty things' during their crises, and to another patient who experienced during his crises 'ideas of reference to which he pays no attention' (see Jelliffe, 1932, pp. 37–39). Miriam H. would have delusional erotic reminiscences whenever she had an oculogyric crisis (see p. 138).

⁵⁷ I saw similar phenomena, and had similar thoughts, regarding another patient (Sam G.), whose story, alas, I didn't tell in the original *Awakenings* (though his face appears on the front cover of the 1976 edition). Sam used to be both a car buff and racing driver, bizarrely helped in the latter by his preternaturally quick reactions and his sudden, 'frivolous' moves. He had to give it up around 1930 due to envelopment in a profound Parkinsonism. 'Awakening,' for him, had some of the 'nostalgic' quality it had for Rose R. In particular, the moment he found himself 'released' by L-DOPA, he started drawing cars. He drew constantly, with great speed, and was *obsessed* by his drawings; if we did not keep him well supplied with paper, he would draw on the walls, on tablecloths, on his bedsheets. His cars were accurate, authentic, and had an odd charm. When he was not drawing, he was talking, or writing – of the old days' in the twenties when he was driving and racing – and this too was full of vividness and immediacy, minute, compelling, *living* detail. He would be completely transported as he drew, talked, or wrote, and spoke of 'the old days' *as if they were now*; the days before 1930 were clearly much more present than the real now; he seemed, like Rose R., to be living (or reliving) the past, even though (like her) he was

she feels her 'past' as present, and that, perhaps it has never felt 'past' for her. Is it possible that Miss R. has never, in fact, moved on from the 'past'? *Could she still be 'in' 1926 forty-three years later?*
Is 1926 'now'?

perfectly 'oriented'. He *knew* that it was 1969, that he was ageing, ill, and in hospital, but felt (and conveyed) his racing youth of the twenties. (See also Sacks and Kohl, 1970a.)



⁵⁸ When Rose did 'awaken' with the administration of L-DOPA in 1969, she was extremely excited and animated, but in a way that was strange. She spoke of Gershwin and other contemporaries as if they were still alive; of events in the mid-twenties as if they had just happened. She had obsolete mannerisms and turns of speech; she gave the impression of a 'rapper' come suddenly to life. We wondered if she was disoriented, if she knew where she was. I asked her various questions, and she gave me a succinct and chilling answer: 'I can give you the date of Pearl Harbor,' she said, 'I can give you the date of Kennedy's assassination. I've registered it all – but none of it seems real. I *know* it's '69, I *know* I'm 64 – but I *feel* it's '26, I *feel* I'm 21. I've been a spectator for the last forty-three years. (There were many other patients who behaved, and even appeared, much younger than their years, as if their personalities, their processes of personal growth and becoming, had been arrested at the same time as their other physical and mental processes.)

Note (1990): Edelman describes how consciousness and memory (which he sees as dependent on continual 'recategorization') are, normally, continually 'updated'; and how this updating depends, in the first place, on *movement*, on free and smooth and orderly movement. The basal ganglia are necessary for this –

28 July. Miss R. sought me out this morning – the first time she had done so in almost two weeks. Her face has lost its jubilant look, and she looks anxious and shadowed and slightly bewildered: 'Things can't last,' she said. 'Something awful is coming. God knows what it is, but it's bad as they come.' I tried to find out more, but Miss R. shook her head: 'It's just a feeling, I can't tell you more . . .'

1 August. A few hours after stating her prediction, Miss R. ran straight into a barrage of difficulties. Suddenly she was ticcing, jammed, and blocked; the beautiful smooth flow which had borne her along seemed to break up, and dam, and crash back on itself. Her walking and talking are gravely affected. She is impelled to rush forward for five or six steps, and then suddenly freezes or jams without warning; she continually gets more excited and frustrated, and with increasing excitement the jamming grows worse. If she can moderate her excitement or her impulsion to run, she can still walk the corridor without freezing or jamming. Analogous problems are affecting her speech: she can only speak softly, if she is to speak at all, for with increased vocal impetus she stutters and stops. I have the feeling that Miss R.'s 'motor space' is becoming confined, so that she rebounds internally if she moves with too much speed or force. Reducing her L-DOPA to 3 gm. a day reduced the dangerous hurry and block, but led to an intensely severe oculogyric crisis – the worst Miss R. has had since starting L-DOPA. Moreover, her 'wiping' tic – which re-appeared on the 28th – has grown more severe and more complex with each passing hour. From a harmless feather-light brush of the chin, the movement has become a deep circular gouging, her right index-finger scratching incessantly in tight little circles, abrading the skin and making it bleed. Miss R. has been quite unable to stop this compulsion *directly*, but she can override it by thrusting her tic-hand deep in her pocket and clutching its lining with all of her force. The moment she forgets to do this, the hand flies up and scratches her face.

Edelman calls them 'organs of succession.' The absence of 'updating' in Rose R., and in all our immobilized basal-ganglia-damaged patients, is in striking accordance with this notion.

August 1969

During the first week of August,⁵⁹ Miss R. continued to have oculogyric crises every day of extreme severity, during which she would be intensely rigid and opisthotonic, anguished, whimpering, and bathed in sweat. Her tics of the right hand became almost too fast for the eye to follow, their rate having increased to almost 300 per minute (an estimate confirmed by a slow-motion film). On 6 August, Miss R. showed very obvious palilia, repeating entire sentences and strings of words again and again: 'I'm going round like a record,' she said, 'which gets stuck in the groove . . .' During the second week of August, her tics became more complex, and were conflated with defensive manoeuvres, counter-tics, and elaborate rituals. Thus Miss R. would clutch someone's hand, release her grip, touch something near by, put her hand in her pocket, withdraw it, slap the pocket *three* times, put it back in the pocket, wipe her chin *five* times, clutch someone's hand . . . and move again and again through this stereotyped sequence.

The evening of 15 August provided the only pleasant interlude in a month otherwise full of disability and suffering. On this evening, quite unexpectedly, Miss R. emerged from her crises and blocking and ticcing, and had a brief return of joyous salacity, accompanied with free-flowing singing and movement. For an hour this evening, she improvised a variety of coprolalic limericks to the tune of 'The Sheikh of Araby,' accompanying herself on the piano with her uncontractured right hand.

Later this week, her motor and vocal block became absolute. She would suddenly call out to Miss Kohl: 'Marge, I . . . Marge, I want . . . Marge! . . .', completely unable to proceed beyond the first word or two of what she so desperately wanted to say. When she tried to write, similarly, her hand (and thoughts) suddenly stopped after a couple of words. If one asked her to try and say what she wanted, softly and slowly, her face would go blank, and her eyes would shift in a tantalized manner, indicating, per-

⁵⁹ The following is based on notes provided by our speech-pathologist, Miss Marjorie Kohl. I myself was away during August.

haps, her frantic inner search for the dislimning thought. Walking became impossible at this time, for Miss R. would find her feet completely stuck to the ground, but the impulse to move would throw her flat on her face. During the last ten days of August, Miss R. seemed to be totally blocked in all spheres of activity; everything about her showed an extremity of tension, which was entirely prevented from finding any outlet. Her face at this time was continually clenched in a horrified, tortured, and anguished expression. Her prediction of a month earlier was completely fulfilled: something awful *had* come, and it was as bad as they came.

1969-72

Miss R.'s reactions to L-DOPA since the summer of 1969 have been almost non-existent compared with her dramatic initial reaction. She has been placed on L-DOPA five further times, each with an increase of dose by degrees to about 3.0 gm. per day. Each time the L-DOPA has procured *some* reduction in her rigidity, oculogyria, and general entrancement, but less and less on each succeeding occasion. It has *never* called forth anything resembling the amazing mobility and mood change of July 1969, and in particular has never recalled the extraordinary sense of 1926-ness which she had at that time. When Miss R. has been on L-DOPA for several weeks its advantages invariably become over-weighed by its disadvantages, and she returns to a state of intense 'block,' crises, and tic-like impulses. The form of her tics has varied a good deal on different occasions: in one of her periods on L-DOPA her crises were always accompanied by a palliative vertigo-eration of the word 'Honeybunch!' which she would repeat twenty or thirty times a minute for the entire day.

However deep and strange her pathological state, Miss R. can invariably be 'awakened' for a few seconds or minutes by external stimuli, although she is obviously quite unable to generate any such stimuli or calls-to-action for herself.⁶⁰ If Miss A. – a fellow-patient with dipsomania – drinks more than twenty times an hour at the water fountain, Miss R. cries, 'Get away from that

fountain, Margaret, or I'll clobber you!' or 'Stop sucking that spout, Margaret, we all know what you really want to suck!' Whenever she hears my name being paged she yells out, 'Dr Sack! Dr Sack!! They're after you again!' and continues to yell this until I have answered the page.

Miss R. is at her best when she is visited – as she frequently is – by any of her devoted family who fly in from all over the country to see her. At such time she is all agog with excitement, her blank masked face cracks into a smile, and she shows a great hunger for family gossip, though no interest at all in political events or other current 'news'; at such times she is able to say a certain amount quite intelligibly, and in particular shows her fondness for jokes and mildly salacious indiscretions. Seeing Miss R. at this time one realizes what a 'normal' and charming and alive personality is imprisoned or suspended by her ridiculous disease.

On a number of occasions I have asked Miss R. about the strange 'nostalgia' which she showed in July 1969, and how she experiences the world generally. She usually becomes distressed and 'blocked' when I ask such questions, but on a few occasions she has given me enough information for me to perceive the almost incredible truth about her. She indicates that in her 'nostalgic' state she *knew* perfectly well that it was 1969 and that she was sixty-four years old, but that she *felt* that it was 1926 and she was twenty-one; she adds that she can't really imagine what it's like being older than twenty-one, because she has never really experienced it. For most of the time, however, there is 'nothing, absolutely nothing, no thoughts at all' in her head, as if she is forced to block off an intolerable and insoluble anachronism – the almost half-century gap between her age as felt and experienced (her *ontological* age) and her actual or *official* age. It seems, in retrospect, as if the L-DOPA must have 'de-blocked' her for a few days, and revealed to her a time-gap beyond comprehension or bearing, and that she has subsequently been forced to 're-block' herself and the possibility of any similar reaction to L-DOPA ever happening again. She continues to look much younger than her years; indeed, in a fundamental sense, she *is* much younger than her age. But she is a Sleeping Beauty whose 'awakening' was unbearable to her, and who will never be awoken again.

⁶⁰ See Appendix: The Electrical Basis of Awakenings, p. 327.