## In Conversation with Sir Denis Hill

Sidney Bloch interviewed Sir Denis Hill in the summer of 1981.

- SB When you first entered psychiatry in 1936 it seems there was a tussle between your interests in neurology and psychiatry.
- DH There wasn't a tussle. As a medical student I had been extremely interested in biological theory. I won't bore you with the curious experiments I attempted to carry out in my flat on drosophila flies. I came to psychiatry with two limbs, a biological one and a very personal one concerned with the individual. I had been much influenced by reading Freud's Collected Works which had been given me on my 21st birthday and by Jung's lectures which he gave when he visited London, and also by reading Anna Freud's The Ego and the Mechanisms of Defence. I have this dual approach in my life: the biological one which I see as mechanism and the psychodynamic one of the person adapting to a series of environmental and individual problems, which I see as the approach involving meaning.

I was also influenced by my first teacher of psychiatry, Henry Yellowlees Snr (the father of our present Chief Medical Officer) who was an autocratic Scot with vast experience in psychiatry and with extraordinary diagnostic acumen. He had a powerful personality, but he was also extremely kind to his assistants, of whom I was one. I had shown interest in psychiatry as a medical student and I had won the two prizes from St Thomas' in the subject. So it wasn't a battle for me. I think I would have left biological psychiatry, however, if it had not been that in my second house job, in neurology, I met Grey Walter. When Golla, the Professor of Mental Pathology at the Maudsley, asked Adrian at Cambridge to send him one of his bright boys to find out whether electroencephalography had anything to offer psychiatry and neurology, Adrian sent Walter. I met Walter at Maida Vale, where I saw him locate cerebral tumours with a three-channel EEG for the first time in the world. Since I had been interested in radio and electronics from early boyhood I found the subject fascinating and was immensely intrigued by its potential.

When the war came, I was selected by the group at Belmont to start an EEG department. Walter meanwhile had gone to the Burden Neurological Institute, and part of his machinery was left behind in the Maudsley basement. We went up in the car and brought it back to Belmont. With a small grant, we built a two-channel EEG machine and recorded EEGs for nine months on a smoked-drum kymograph. Then Sargant managed, through the American Red Cross, to

get us a purpose-made EEG machine, the second one in England. Denis Williams had brought the first back from the States before the war and had used it at Queen Square, before taking it to Oxford when he joined the RAF.

- SB How did your interest in epilepsy begin?
- DH That came as a result of the technology. My interest in epilepsy literally arose out of the fact that I was examining so many epileptics. I was declared unfit for military service at the beginning of the war owing to asthma and emphysema. This released me to do civilian work, and I did a great deal of EEG work during the war. After the war I looked after the EEG Department at Queen Square and started a department at the Maudsley. By 1949 I realized that the sort of attacks which were called psychomotor epilepsy were focal discharges in the temporal lobe. By chance, Frederick Gibbs, who was commissioned to come over to the First International EEG Congress in Paris, couldn't come, and the organizers asked me to do it instead; the subject was psychomotor epilepsy. I analysed 2,000 records from Queen Square and the Maudsley and I was able to show that the sharp waves, as we then called them, were located in the temporal lobe, which is what Gibbs had found too. But, unfortunately for me, I misunderstood them. I thought they were conducted there from some deep structures in the brain rather than arising there. If I had used any imagination at all, I would have realized there was pathology in the temporal lobe.
- SB Was your EEG department at the Maudsley, founded in 1947, the first in a psychiatric hospital?
- DH No, Sam Last started one at Runwell during the war, but our unit was perhaps the first highly organized one. We had developed a ward for epileptics. It was the first ward for both sexes and all ages. We had grannies and grandfathers and parents and adolescents. And we had a few children in it, because the children's department was not yet in operation. The women were at one end in a dormitory, the men at the other, and there was a common dayroom. It was a family ward, if you like, in the Maudsley. It was rather frowned upon in 1947. This was the first mixed ward in the Maudsley; as far as I know, probably one of the first mixed wards in the country.

From about 1947 I became intensely interested in epilepsy, particularly in the relationship between lesions and personality, and in the epileptic who had behavioural and psychological problems. We had a tremendous stimulus from the arrival of Murray Falconer from New Zealand and the creation of the Neurosurgical Unit. We took an active part in

preparing cases for consideration of surgery. Murray Falconer made one tremendous contribution through his skill as a surgeon. Nearly all the American and Canadian neurosurgeons sucked out the temporal lobe at operation, and so they did not have material to examine microscopically. Falconer on the other hand dissected out the anterior third of the temporal lobe with its deep structures as one piece, and therefore it became available for neuropathology. Immediately that happened it opened up the whole subject of Ammon's horn sclerosis, which had fascinated European neuropathologists for years! The result was that our colleague Alfred Meyer, a distinguished neuropathologist, was able to look at the question of the early causation of epilepsy, the relationship to anoxia, birth damage, and so forth.

SB Could I move on to a particular relationship between EEG and psychiatry—the studies of the psychopath's brainwaves. I presume that led you into forensic psychiatry?

DH This was rather accidental.

SB You seem to be full of accidents!

DH That's right! A case turned up in Brixton Prison of a young man who was accused of murdering his mother. I had mumps at the time and I was able to lie in bed and think. And this case aroused my interest in the question whether there might be some truth in the phenomenon of abnormal states of consciousness at the time of murder (which, of course, many people accused of murder say they have had). In this particular case I believed there might be some truth in it because he was known to have had spontaneous hypoglycaemia. We tried to reproduce the physiological circumstances of the crime. It seemed to come off; the accused went to Broadmoor and we published his case in the Lancet. The result was that more and more defence lawyers wanted EEGs done on their cases. The Prison Department then decided to invite me to do EEGs on all cases awaiting trial in the Home Counties. In this way I got a consecutive series of alleged murderers and I saw all the famous murderers over a ten-year period.

I insisted that my reports went to both sides in Court. So I served as an independent expert witness. I was only rarely called to give evidence, usually to say the EEG was normal.

SB The EEG, it seems, also led you to your deep interest in the concept of psychopathy.

DH Yes, again accidentally. Very close to Belmont, where as I have said I was based during the war, is the large mental hospital of Banstead. And it was to Banstead that psychopathic soldiers were admitted from all over the country. One of the hospital's doctors, Donald Waterson, and I decided to examine a series of these so-called psychopathic patients. They were a collection of the most terrible brigands. And out of that came

a paper in 1942 about the EEG and psychopathic personality in which we put forward the idea that the slow wave anomalies which we saw would have been normal for a child or an adolescent but not for an adult; our hypothesis therefore was that this was reflecting some form of immaturity of the nervous system.

SB Has this hypothesis stood the test of time?

DH Not entirely. The findings were replicated by several groups in the United States. Denis Williams supported it from his studies, and he had a lot of cases. But the murderer work was repeated by Maurice Driver only, and he could not find the abnormalities that Desmond Pond and I had found in our murderer series. I didn't comment on Driver's findings at the time, but the answer is quite easy; firstly he had no normal controls, and secondly the Maudsley department had become only interested in organic cerebral disease and was only looking for lesions. What we saw originally were what you might call variations of the normal but sufficiently interesting and anomalous to demand explanation. I think that if somebody does a carefully controlled study he will find the same thing again. The important thing is that, with any group of patients studied, the socalled anomalies, if you like to call them that, are found with diminishing prevalence the older the patients are.

SB Clearly as a result of your research and clinical work in forensic psychiatry, you were asked to serve on a number of important committees.

DH The first time was in 1959 when I was put on a Joint Home Office/DHSS committee to look at the Special Hospitals. Out of that came our idea for what are now called Medium Secure Units, although our idea was slightly different. I have always found that when I am asked to serve on some committee it's a form of postgraduate education. I took a very close look at Broadmoor, Rampton and Moss Side. I have also found that the people one meets on these committees can influence one tremendously. If you work together for a period of two or three years and you meet frequently and travel about the country, you get to know people you didn't know before, people with a new slant on things. For example, I met Sir Roger Ormrod on the Special Hospitals Committee, and remembered that we were at school together. We became great friends, and out of that came the invitation to him to join the Institute of Psychiatry's Committee of Management, and finally to be Chairman of it. Now he is chairman of the Postgraduate Federation.

Because I was known to be interested, I suppose, I was selected for the Aarvold Committee later, in 1972. Aarvold was set up as an emergency in a time of stress, after the young man Graham Young who had been discharged from Broadmoor proceeded to murder people by poisoning; he had been a boy poisoner—very rare

indeed. The Aarvold Report offended Broadmoor consultants, because what we suggested was a tighter rein on their clinical freedom with regard to discharge of patients. We also hinted that it would be a good idea if the Broadmoor staff worked more as a team; and we recommended that every bit of information that was available on the patient as seen by people every day of the week in the workshops, in the wards, by the nurses, occupational therapists, and so on, should be fed in to the system; everything should not be left to the psychiatrist alone, although he had the ultimate responsibility. We also found great gaps in the organization of follow-up care of people discharged from Broadmoor.

- SB The Butler Committee job must have been a great challenge.
- DH It was hard work but extremely interesting. We worked over two and a half years, had about sixty meetings, under the superb chairmanship of Lord Butler. One of the problems for the Committee was the McNaughton rules, which I was asked to rewrite. I had six go's at the job, and each time they found logical holes in it and said the argument was circular. After the sixth attempt, with the help, I may say, of a number of senior colleagues whom I took it to in confidence, the Committee accepted my draft. Whether it'll ever get into the law is another matter. It's a terrible sadness to all of us who were involved in a tremendous amount of work, that, although we reported to Parliament in 1975, this report, and four or five other equally important ones, have never been implemented.
- SB Has your work on the various committees led you to any major conclusions regarding the management of the mentally abnormal offender?
- DH One thing that I became absolutely clear about is that there is no future for the Special Hospitals in isolation, from the point of view of both staff and patients. For instance, one large, highly-specialized hospital, Broadmoor, takes patients from all over England and Wales, and for all I know, Northern Ireland. Patients come from hundreds of miles away and when discharged they go well beyond the community which the hospital could possibly serve. The links after discharge are wholly fortuitous, as to who happens to be around where the patient has his home. From the point of view of staff, the longer they are left in isolation behind high walls the more inward-looking they become and the more certain they are that what they do is right.

If you're a forensic psychiatrist working in a place like Broadmoor, it's like being a neurosurgeon in a sense: you have to be right because being wrong is so awful. And that isn't fair on anyone. I think that's the real problem, that enormously important decisions are taken by people who are living a practically monastic life inside this hospital, doing their best—and, my God, they do work hard and are very conscientious—but

- they must have some certainty about their decisions. If they have terrible doubts they will never make decisions. In my view the training of all staff in the Special Hospitals should be integrated with the development of forensic psychiatric services in the country as a whole, and medium secure units must be given status by being placed as near as possible to academic departments of psychiatry.
- SB You would no doubt applaud the link between Broadmoor and the Institute of Psychiatry.
- DH Yes. I initiated that! I was hoping for joint appointments between Broadmoor and the Institute for the good of both, to support the development of forensic psychiatry in the Institute and in Broadmoor. My cocommittee members on Butler and I thought that all grades of staff should move around during their training, and subsequently, if necessary, between medium secure units, academic departments and the Special Hospitals. There should be free movement. The hospital—whether it be Broadmoor or a medium secure unit—should be merely one end of a forensic community service.
- SB You began another stage in your career when you went to the Middlesex in 1961.
- DH The development of academic medicine in London was late, and always behind the development of academic medicine outside London. The reason for this was that the London teaching hospitals were run by distinguished, senior, part-time consultants, who originally earned their money in private practice and lived and worked in Harley Street. Psychiatry developed in the twelve London teaching hospitals in this context, and was run by part-time consultants, many well known, but who had practically no research interest and little academic interest. Undergraduate teaching was done through a series of lectures, and practical experience was limited to a small number of visits to a mental hospital where patients were demonstrated.

University departments of psychiatry had developed in provincial universities long before they appeared in London, although from the 1920s there had existed the Maudsley, with its associated medical school recognized by the University, where there were Chairs of Psychiatry and of Pathology in Relation to Mental Health. The idea that London should have other academic departments was launched by the Medical Research Council in 1959 when it undertook a review (which I did for them) of the state of psychiatric research in Britain. It became apparent that, although there were substantial departments in the 12 undergraduate teaching hospitals, not a penny was being spent on research. Moreover, psychiatry did not feature in the final examinations, and students did not take the subject seriously. The MRC persuaded the University Grants Committee to take this up, and as a result the

UGC on their next visitation went round saying: 'Why haven't you got a department of academic psychiatry?'

The Middlesex was the first to take up that challenge and I was invited to fill the post, which I did in 1961. Fortunately, there was a brand-new medical school building at the Middlesex, and we were able to move into vacated space within the hospital itself. It was an extremely exciting time. I didn't have a room for nine months. For some months I hadn't a secretary. But in a matter of two years we had built up a substantial department with in-patient beds and an established place in the curriculum. I think that the group of people who came with me had an exciting time. Among them was John Hinton who succeeded me; Arthur Crisp, who later went to become Professor at St George's and George Fenton, Professor at Queen's University, Belfast; Victor Meyer and Miller Maier, both psychologists of distinction; and there were others, such as Heinz Wolff, Joe Sandler and the late Walter Joffe. We had a strong multidisciplinary team.

- SB Paradoxically, you took on the chairmanship of the Association of University Teachers of Psychiatry just as you were leaving undergraduate academic psychiatry. Could you talk about your role in AUTP?
- DH I must give you a bit of the earlier history. The AUTP's predecessor was the Association of Undergraduate Teachers of Psychiatry, was founded after the war and was more or less confined to London. It was an Association of heads of departments of undergraduate teaching hospitals. At that time I was head of the department at King's, and the Association was formed of about ten people. We used to meet in Eric Strauss's consulting room. He was the psychiatrist at Bart's, and I had been one of his clinical assistants. We met once a month and talked about teaching undergraduates and that was all. It never did much, never held conferences, never published anything-just met like a club. And after a few provincial departments came in, it still retained its title of the Association of Undergraduate Teachers of Psychiatry. I have to admit this to youthe reason for the title was the hostility which the undergraduate teachers in London felt towards the Maudsley. The idea was to keep it out. Although I had been a part-time member of the Maudsley staff, it was because I was in charge at King's that I was a member

of it. When I succeeded Aubrey Lewis at the Institute in 1966 I pointed out to the Association's members that perhaps the reason for the original title had long been lost, but as far as I was concerned I had to resign. Were they quite sure that they wished to keep this purely as an Association of Undergraduate Teachers or would it not be better to call it an Association of University Teachers, and I gave them good reasons why it should be that. They agreed and went even further by appointing me Chairman!

- SB Good grief!
- DH Why was it important that there should be an Association of University Teachers of Psychiatry? I thought it vital in the period that lay ahead that psychiatry should have a strong academic backbone in the country, that academic psychiatry should be represented on all organizations which were concerned with the curriculum, with the examination system and with the registration of specialists, and that—although in 1966 one could not anticipate with certainty the formation of a Royal College of Psychiatrists-it would be extremely dangerous to leave the future of academic psychiatry in the hands of non-academics. As soon as a Royal College was obviously coming, I very strongly tried to persuade everybody that the Universities, through the AUTP, should be an equal partner with the College in determining all academic matters for psychiatry. That was my main reason.
- SB And that partnership, of course, has borne much fruit?
- DH I would have thought that it has worked as well as could be expected. The system is right, but whether the standards are I am not sure. One aspect I don't care for is the undoubted hegemony of academic psychiatry over psychiatry in Britain. You can think of almost any public office you like, where psychiatrists are needed, including Presidents of the Royal College, and you find they are all Professors.
- SB This is unlike the American Psychiatric Association, in which there is much more sharing of various roles among other groups.
- DH Yes, that's right. Wherever a University Department of Psychiatry has been formed, after a period of years the academic part of that department has taken the leading role. Unlike medicine or surgery, say, in London.

(To be continued next month)