In Conversation with Max Hamilton

Brian Barraclough interviewed Max Hamilton, Emeritus Professor of Psychiatry at Leeds University, in Summer 1982.

BB I thought we might start by discussing your famous rating scale.

MH I think it might be better to start with why I took up psychiatry at all.

BB Where did you go to school?

MH At the Central Foundation School in London. I now realize what a remarkably far-seeing and modern headmaster we had. He had grasped the fundamental points about teaching mathematics; that it is not an easy subject and you must devote time to it. In my matriculation year, out of 35 lessons a week, 18 were on mathematical subjects. Most of the boys who left that school had one characteristic which I also had: I wasn't a mathematician, but I wasn't afraid of it. Most people tremble when they sit in front of a page of maths—it doesn't worry me. I know it is going to take time, but if I go at it long enough, I can understand it.

I was keen on science and took up medicine as the most practical aspect, but once I got into clinical teaching at University College I found it dull. The teaching was *obiter dictum*. They laid down the law. These are the signs and symptoms, this is the diagnosis and this is the treatment. I took little interest and as a result I claim, I will not say I boast, that I have failed in more examinations than most people have taken. As I took one half of my MB I failed in one subject and the next time I took it I failed in the other.

I went eventually in 1936 to work in Mile End Hospital and became District Medical Officer—a sort of GP to old age pensioners and the unemployed. I used the opportunity to try and do some worthwhile work. One of the first things I discovered was that my diabetics never stuck to their diet; they were a menace because they were likely to go into hypoglycaemia. I slowly cottoned on to the fact that they weren't on a diet because it was expensive and too complicated.

Some patients had high blood pressure so I decided to do research on the subject. Before I started trying to treat them, I considered the placebo effect, which I had heard of vaguely. Medicines in those days were always 'one tablespoon three times a day'. So I put in a trace of quinine which made it nice and bitter, put them all on it and as the weeks went by their blood pressure came down.

BB What about the war?

MH I joined the RAF when the war broke out and as I had worked in general medicine I became a station medical officer in an engineering unit. Our job was to pick up crashed aircraft, repair what was reparable and cannibalize what wasn't. But because it was a back unit, we had a lot of people who had been downgraded from the fighting units on psychiatric grounds. I had an opportunity of meeting them, not only as patients but also as officers and colleagues, and it was very obvious that there was real suffering. There was no question that one could dismiss it, as was traditional in medicine, as just 'neurotic'.

BB Was this your first encounter with mental illness?

MH I had been presented with the usual array of 'freaks' as a student, and I had been at Bernard Hart's clinic, the first English psychiatric out-patient unit at a teaching hospital, but it all rather passed over me. By 1943 I saw the war was going to end; I had to make up my mind what to do. I could continue in general medicine, but with great difficulty because I had been out of touch with hospital medicine. General practice in a military unit is a cinch—at one time it was less than half an hour's work a day. There wasn't enough experience there to cope with Membership. To go into psychiatry I would have to take the DPM. That was in two parts, so I thought here's something practical I can do, and that is what started the whole thing.

The first part of the DPM was neuroanatomy, neurophysiology and psychology—just reading. I decided to work for it and joined a postal course. When I started to read books on psychology, Woodworth's *Introduction to Psychology* was the one I got hold of. It was a revelation, one of the great experiences of my life. For the first time I met serious discussion of fundamental problems. What is science? What's the difference between scientific theory and non-scientific theory? What is an experiment? How do you draw conclusions from an experiment? How do you experiment on the mind?

What is the difference between scientific theory and non-scientific theory? My favourite example is: the moon is made of green cheese and that all the troubles of the world are due to the machinations of the Communists. The first statement is a scientific theory because you can test it—either it is made of green cheese or it is not, but the other one is not because you can interpret everything that way.

For the first time I met somebody dealing with important things in a sophisticated way. That decided me. I was definitely going to do psychiatry. Time came to take the DPM. I sat down seriously to decide what sort of things I was likely to be asked. For the first time I grasped that there are important things which examiners ask and there are unimportant ones they

don't. The result was that of the nine odd questions I had to answer, I had got seven at my fingertips. I never had had such an easy examination in life. I had my viva on D-Day! I put on my best RAF uniform, nice two stripes of a lieutenant to impress the examiners. I came to the exam and there was Desmond Curran of St George's, in naval uniform with gold rings all the way up to his shoulders. 'Now', they said, 'what are the characteristics of reflex action?' I was staggered. This was a question I had answered, and as I had memorized them and written them all down, it was the perfect answer. I asked, 'All of them?' 'Yes, of course.' So I took a deep breath and started. I was stopped after the first four. I had never had such an amusing exam in my life.

After that I was stuck. You couldn't get the DPM without experience and I was in general medical work. There was not much point in reading psychiatry without seeing patients, but I could read more psychology. I am the only person who has read through Pavlov's book three times. And Lashley. Have you ever heard of Lashley? He is the man who dug bits out of rats' brains. By this time I was beginning to get some understanding of what I wanted to do. I would have to learn statistics and psychometrics. I left the RAF at the end of 1945 and joined the Maudsley. I had an interview with Aubrey Lewis and talked him into taking me on.

BB Did you interview Aubrey Lewis?

MH If you like. I wrote and sought an interview. I explained that I had become interested because of my experience and reading and I wanted a proper training. He immediately fired, 'Ah yes, have you read so and so?' Well, I was able to say yes. This was a characteristic of Aubrey, he always had to be one up on you. 'Have you read Lashley?' 'Oh yes Sir, I have read K. S. Lashley.'

Once at the Maudsley, I worked under Eric Guttman. He was brilliant clinically, worldly-wise and sophisticated. When you think he was an immigrant, the subtlety of his knowledge of the English social scene was extraordinary. He could tell you the difference between the social flavour of West Kensington and South Kensington. I went to the Department of Psychology, then run by Hans Eysenck. He had psychologists there working for their PhDs and he organized a course in factor analysis. This was just what I wanted. At first it was difficult, but when it got on to factor analysis I suddenly thought, 'This is what I did at school—co-ordinate geometry'. After that I sat back and enjoyed it.

Soon Aubrey Lewis took a dislike to me. When he looked at me with those rather prominent eyes of his I trembled. Instead of doing an ordinary ward-round he went through every one of my patients in detail. He was gunning for me. Why he did it I don't know. I got three months' notice.

BB That must have been a disappointment.

MH A great shock. But I rushed around saying 'I am going to do something' and finally I got hold of Dr Moody, head of the Department of Psychological Medicine at University College Hospital, and told him that I would like to work at UCH because of the opportunity to learn psychology. At first they didn't know what to do with me. After a while I managed to establish a job in liaison psychiatry—having been called once to Casualty and once to the Obstetric Department, word got around that somebody was available. I did a good deal of psychotherapy under supervision, but there was plenty of time to spare and all of it was in the Psychology Department.

BB Who was the Professor?

MH Sir Cyril Burt. I saw a fair amount of him. He was always kind, very friendly, and had endless patience—if you went in with a problem or difficulty, he would sit down and discuss it with you. He had a 'thing' about doctors and was delighted I was coming to his department. Remember he was a clinical psychologist. When he was first given a part-time job as psychologist to the London County Council, mental subnormality was diagnosed by the school medical officers by putting a tape around the children's heads. His inquiry on the young delinquent is a classical work. His lectures were superb. My lecture notes are 39 years old now but are still good. He was a statistical psychologist of the highest order. We didn't know he was doing a little faking. What staggers me is that he faked it so badly. I also met his postgraduates—70, from all over the world. Most have become eminent professors in psychology. They had been in five or six years of war and were mature and well selected. So for the first time I was mixing with a group of highly intelligent people, all doing research and wanting to learn about research—Egyptians, Indians, New Zealanders, Australians, Canadians, Americans. That was a halcyon period for me. I was doing my work during the day, popping over to the Department and meeting these people and listening to their ideas. I don't suppose I went to bed before 2.00 for three or four years. Within a couple of years I was probably the only psychiatrist in the country who knew psychometrics, rating scales and theories of measurement. When I decided to do an MD I thought I would study a psychosomatic problem—gastric and duodenal ulcer—and use my knowledge of psychometrics. I had also got a letter out of the blue asking me if I would like to write a short book on psychosomatics, offering me £20 down. £20 was a lot of money then, especially for a poor registrar, and I agreed. That hung over me for years, and a number of times I would have given it up if only I had had £20 to give back. Anyway, I did write it and it was

a classic in its way. It was a small book, *Psychosomatics*,[1] and compared to other books in the field, it was different in approach.

BB Did you have an objective in view at this point—that you wanted to be something?

MH No. Although I was in my 30s, I was naive. Nobody ever suggested to me, for instance, that I should join the Royal Medico-Psychological Association, though I had joined the British Psychological Society. I was engrossed and fascinated by new sciences—psychology, neurophysiology, mathematics, statistics, psychometrics—worlds of ideas were opening up to me. Cyril Burt was the first teacher I had had who took notice of me. He set high standards, and I would sweat blood to meet them.

My chiefs in the Department of Psychological Medicine at UCH obviously thought me mildly crazy. What's he doing with all these figures? How do you experiment in psychiatry? I tried to explain to them; they listened very patiently, but whether or not they understood, I don't know. It was exciting and fascinating and this was what I was going to do one day. Science, scientific method—that is the thing to do in psychiatry.

BB Apply the scientific method to mental illness. Do you think the Maudsley had had any influence on you in this way?

MH Eric Guttmann had the German phenomenological approach and his ability to describe a patient, his personality, his symptoms and his behaviour, fascinated me and I have always tried to follow that. Aubrey Lewis was stimulating in many ways. He was critical and would think about ideas—not just repeating what was in textbooks. I had never had that before in medical teaching. His lectures on classification convinced me, for example, that the distinction between psychotic and neurotic is absurd. In the same way organic and functional has little meaning now. One sees this vividly in discussions on neurotic versus psychotic depression. In other ways, it was surprising how little the Maudsley touched me.

BB Getting back to UCH . . .

MH By 1950 I had been a registrar at UCH for four years and they had made several attempts to eject me. Finally they said: 'Out, no more'. Of course I could have got a job as senior registrar, but not at UCH; so I went to Cane Hill.

BB That must have been a contrast.

MH Yes, but it was fascinating. I was put in charge of chronic wards and I started to go through them systematically. I was meeting clinical material found in textbooks which I hadn't seen before. I enjoyed it immensely. Alexander Walk was the superintendent. He was nice—a wise bird. Very old fashioned, insisted on the office meeting every morning, which everybody grumbled at, but I didn't because I had seen what it was like in the RAF. In my first Unit, the CO had insisted there was a dinner for all the officers once a month, but at the other units they didn't. I noticed the difference. In the first place I had got to know everybody. If everybody meets in the morning, for coffee and talk—you get to know your colleagues.

I left to become senior registrar at King's; back to Denmark Hill but on the other side of the road. That was 1950–1. I worked there under Denis Hill, the departmental head. It was amusing because I was two years his senior. It was a clinical job; a department based on out-patient psychotherapy and a consultation service, but we did have ECT. I did one piece of research which I never published. In fact I did two. My medical colleagues said we took so much time with patients. I thought I would check on this. I took all new patients for three months, and a year afterwards I found out how much time had been spent with them. Of the hundred patients, only three or four were still having psychotherapy. An average three hours had been spent on a patient. That compares favourably with what other patients in other specialties get. People always think that medical and surgical patients don't require much time, but when you work it out it is not like that at all. Take the shortest case you can possibly think of—acute appendicitis. The patient will be seen by the casualty officer and by the surgical registrar: about three-quarters of an hour altogether. He goes into the wards, is interviewed by the anaesthetist and then has surgery. The operation takes 20 minutes, but there are three people there, so that is an hour. There is already an hour beforehand so that's two hours. He will be seen at least once or twice by the houseman, the registrar, the consultant will perhaps have a word with him before his discharge, that is nearly three hours and that is the shortest surgical case one can think of. The patient with duodenal ulcer will be seen in out-patients, if he is going to have surgery, by the registrar, he will come in, there will be a case conference on him, radiology, barium meal, that's a radiologist's time, operation, follow-up, perhaps transfusions—the amount of time they pile up is quite high. They don't realize it because several people are doing it and not anyone does much. It is a delusion that psychiatric patients take a long time.

BB Did you publish that?

MH No.

BB Wasn't that part of the ethos then, to publish?

MH I published my MD thesis.[2] That was a piece of research, but it never struck me these other things should be published. It was just a 'cases I have cured' paper. Most papers were of that type in those days. Look at the *Journal of Mental Science* for 1950.

After King's I got a job as senior hospital medical

officer at Springfield. I picked on that because my home was near the hospital. I didn't appreciate that a SHMO was regarded as a dead-end job. To me it was a rise in income and it was working in a hospital. Dr Beccles was the superintendent. It was said of him that he knew the first and surname of every patient in the hospital and their relatives—could speak to every one personally. He checked on everything I did. I was in charge of an acute admission ward with ten new cases a week, and I had four chronic wards with 70 patients each. I am proud of that job. I think I am the only professor who has been a SHMO, who knew the routine grind of the mental hospital. It has stood me in good stead.

BB What was it like working in a mental hospital in 1950?

MH You had ECT, unmodified at first. There were sedatives, barbiturates and at a pinch morphine if a patient was very disturbed, but experienced nurses could talk them down. The conditions were appalling. Patients were locked in. They looked like chronic patients in their old, dilapidated clothes; they sat and did little. But I never knew that they were bullied or ill-treated.

Each morning I worked in the acute ward, every afternoon in the chronic wards. The nurses presented me with prescription cards to sign as they had at Cane Hill. I wouldn't do it. I insisted on seeing the patients, wondering what these prescriptions were for. It was very hard work at first. I had to do one ward at a time. (At Cane Hill I had found a patient who had been on weekly liver extract in enormous doses (this is in the days before Vitamin B12) for five years. The prescription derived from a single blood count which had shown a hyperchromic count.) I did that with all the wards, cutting down on sedatives and hypnotics.

In the acute ward I devised a little board. Every patient had a tag which was hung on a hook and arranged so that the patient who had been in the ward the longest was on the top left and the newest patient was added in at the bottom right. Every morning I said to the ward sister: 'What are these patients at the top doing here? What are we going to do about it?' And we would go through them systematically. As for the chronic patients, Beccles insisted they were to be examined twice a year instead of the statutory once and so I brought along a sphygmomamometer and ophthalmoscope, which apparently had not been seen there before. Looking at fundi of a chronic schizophrenic is not so much a science as a sport. You have to wait to get a glimpse of it as it flicks past. I found fascinating neurological conditions. I remember one Parkinsonian patient vividly who had had a hemiplegia and it had gone on the hemiplegic side. You read about that in books, but I saw it. I had cards, one for each patient, to enable me to remember who they were, such as, 'This is the one who calls me bastard every time I walk into the ward'. I remember Denis Hill coming up to me once and saying: 'How much work do you do, Max? How many patients have you got to look after?' I took out my pack of cards and counted them. Here are the patients I see once a week, these once a fortnight, these once a month and so on. He went away with a dazed look in his eyes!

I was later given a senile ward. I went through those patients to see how many were depressed and thought 'Now's my chance, I'm going to give them ECT.' Muscle relaxants had just arrived. The nurses said 'Poor old things, haven't they got the right to be left alone and pass away in peace?' But we found a few who improved. Several were transferred to ordinary wards and we even discharged one patient. I never thought of writing that up.

BB You would have anticipated Martin Roth.

MH I think he was doing it at the same time. As soon as the relaxants arrived it was obvious you could give ECT to patients to whom previously you couldn't. But he had the wit to realize that that was publishable. One thing they said though was that you could now give ECT to patients with hypertension because you wouldn't have the physical effort increasing the high blood pressure. So I measured the patient's blood pressure before and after the ECT to see whether it did rise. I discovered the 'Hamilton manoeuvre', the trick of closing off the circulation to the other arm before injecting the muscle relaxant; then you could see if the patient had a convulsion by observing that arm. I published that. I looked at another problem. We had a part-timer who did the insulin therapy. I passed on schizophrenics to him. Some he accepted and some he refused. I had to treat them as best I could—some with ECT—and I realized I could look at this. I had two series of patients. I couldn't tell why he rejected some. I looked through all my data and carefully collated it and I got the Regional research prize. Whether they had insulin or ECT made no difference. He turned down the older patients. But I correlated age with symptoms and history and it didn't make any difference.

BB Did you publish that?

MH No, because it wasn't a properly randomized trial.

References

[1]Hamilton, M. (1955) *Psychosomatics*. London: Chapman & Hall.

[2]—— (1950) The personality of dyspeptics with special reference to gastric and duodenal ulcer. *British Journal of Medical Psychology*, **23**, 182–98.

(To be continued next month)