An interview with Bill Smith

Conducted by Ann Silver and Martin Rosenberg in 2009
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This interview with Bill Smith (WS) was conducted by Ann Silver (AS) and Martin Rosenberg (MR) on 20 July 2009 in the ‘small meeting room’ in the Department of Physiology, Development and Neuroscience in Cambridge.

AS: Thank you very much indeed for coming, Bill. And before we get onto your career and your particular association with physiology, we’d like to hear something about your family and what it was like growing up in Germany in the War. So, first of all, then: where were you born?

WS: In Berlin.

MR: Which part of Berlin?

WS: Well, the centre of Berlin: Senefelderplatz [...] – I believe he was some kind of printer and they named the square after him. Schwedter Straße, which was off there.

AS: And ... a bit about your family. What were your parents’ occupations?

WS: My mother was a really a Jacqueline of all trades, but primarily a seamstress, and of course, housewife. And my father was a master butcher.

MR: And what was the family name?

WS: Smith.

MR: Schmidt?

WS: No, Smith.

MR: Smith? Really?
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WS: Why do you seem surprised?

MR: Well, it’s not a German name, Smith.

WS: Well, that’s not my fault, is it? You get the name you’re born with. That’s what it says on my birth certificate.

MR: And your first name?

WS: William.

AS: So, William Smith.

WS: Named after my grandfather, who was a Geordie. [...] He was born in Newcastle.

MR: So how did he go to Germany?

WS: I don’t know: by train ...

AS: So was he British by birth or German by birth?

WS: ... He was born in Newcastle. He was British by birth.

MR: And your grandmother?

WS: My grandmother? I’m not sure about my grandmother. She was either Austrian or German.

AS: And how did your grandfather get – apart from the train – from Newcastle to Germany?

WS: Well, he was a little chap and in those days – it was the end of the 19th century – it was either the coalmines or the ship yards. He was just a little chap so he somehow hitchhiked his way to Newmarket, and became a stable boy. And, belying my looks, he became a jockey and subsequently a trainer. And some German aristocrat, you know, liked the looks of him and gave him a job in Germany.

AS: Ah, that’s interesting.

MR: And on your mother’s side – your other grandparents?

WS: Well, my mother’s father, he was ... an architect, ...but I ... don’t know what happened: they must have separated and divorced, and the sort-of step-grandfather I had ... was a rather more interesting chap, he was a carpenter – a lot in common with Jesus Christ. So he was a good chap. But my grandmother was a ... most remarkable woman.

MR: In what respect?

WS: Well, she was a very skilful seamstress, and she used to do gentlemen’s shirts, which is a very difficult thing to do. But she was a kind of Mrs Beeton, and there was just nothing she couldn’t do. And everything was organised, you know. The potatoes came into the cellar, and she’d boil a chicken’s foot,
conserves and jam were made. Absolutely amazing woman – she was quite remarkable. And she was very kind with it.

MR: And did you live in a nice house?

WS: A nice house? Well, in Berlin, in those days, I mean, virtually all of the houses were tenements.

MR: Is it still there?

WS: It is still there. My brother visited Berlin. I can’t go back to Berlin, because I’m just not up to it. I’ve been in Germany several times on business and visiting, but I just can’t face Berlin. It’s too much. But my brother was there and he brought back photographs, and the house was still there. But now my son was there more recently and they’ve taken, I think, most of the street down and it’s now a printing organisation. They call themselves, rather pretentiously, Guttenberg. But this particular son – I’ve got three – he was there previously and he went into the back of this large building, and this particular wall was still there. Everything else was completely new, but there was a wall and they had this pole running horizontally across the wall, brought forward by brackets.

MR: Was this in the Russian zone, or the ...

WS: It was in the Russian zone. We were bombed out and my father was lucky enough to get somewhere in West Berlin: Steglitz, which was a different, a more upmarket kind of place.

MR: So you were there in the 30s then ...

WS: Yes, I was born in ’29, so when the war started I must have been about 10 or so. And people often ask me what it was like, but I must confess I felt no pain. I mean, it was just life. My father had a butcher’s shop and in the run-up to the 40s there were some not-so-nice people who stopped people buying sausages at my father’s shop because of the name over the shop.

MR: Because of the English name?

WS: Yes. Perhaps you can guess who these people were!

AS: And you mentioned your brother: were there just the two of you?

WS: Three. [...] One, the small brother, Charles, he died of leukaemia. He was about 4 or 5. It was a great tragedy for my mother. But Frank came over here with us, in ’46.

MR: And did you have hobbies? How did you spend your time? You were a young boy ...

WS: Well, I was always very interested in fashion design, even quite early on. I still am, to some extent. I used to do these drawings of ladies. I was a good draughtsman.

MR: So your mother was a seamstress and you were interested in fashion design?
WS: Yes, but I was a boy.

MR: So the war years, it just, I mean, as a boy, things just happened and you were there.

WS: Well, I mean, a lot happened.

MR: Like in London.

WS: Yes, there was a similarity. There was the bombing by the RAF by night – which is rather ironic, because when I came here I had to do my National Service in the RAF – and the Americans by day.

AS: You were in a slightly peculiar position because of having a grandfather from – a Geordie grandfather. What was the feeling, what was the attitude to the bombing? The general, overall attitude.

WS: Where I lived, in the centre in Berlin, you can best compare that with the Cockneys in London. I mean, they were great stoics: these things just happened. They didn’t particularly like it, but you know. People died, houses burnt down … I’ve never ceased to marvel, I still do, what people will put up with. They put up with Mr Brown!

AS: And what about food?

WS: Food? Yes, well, there was food, certainly not plenty: it was rationed. And there was a lot of faked up things like pumice powder and soap.

MR: Ersatz.

WS: Ersatz.

AS: And was it the same as here that if you lived in the country, you were rather better off because you could …

WS: Well, that’s pure surmise on my part, because I wasn’t in the country, I was always in the centre of Berlin, except when … halfway through primary school … we watched the school burn down. We all stood there clapping our hands: I rather regret that now, but I didn’t know any better then. And we were evacuated to Usedom.

AS: Which is where?

WS: Usedom and Wolin: they’re two islands in the Stettin Bay in East Germany, on the east coast, the Baltic. Usedom had a peninsula jutting out into the sea which was called Peenemünde, where Werner von Braun developed the V1 and the V2.

MR: So quite a dangerous place to be!

WS: Well, it was edifying. I mean, we didn’t see very much because, obviously we were barred from there, and although it doesn’t look very big on a map, it’s quite a bit island. But they had these remotely controlled coastal guns, which were of great interest to us. And the local doctor – in Germany, of course,
having a car during the war was a no-no – the local doctor had two cars. And one, he was driving, and the other being painted. Because the place is full of sand dunes, and being well out to sea, it used to sandblast the motor cars, so you saw cars going round with shiny metal. Quite beautiful. But, of course, it would chip it’s way through the metal, so he had his car painted every year or so, and while the paint was drying, he was using the other one.

AS: And when your school was evacuated there, was your family …

WS: It wasn’t my school; it was just a bunch of boys. Just boys. I don’t know, I can’t remember it being my school.

MR: Just boys; not girls?

WS: I think it was just boys, yes. And it was run by some – I never got to the bottom of it – but it was run by some Party people; they wore black shirts and trousers and the Swastika thing. Probably some cultural thing; Germans are vultures for culture. But I didn’t like it, and I managed to get some SOS out to my father, who came down all the way, which could not have been very easy, because travel was very restricted. And he was out … – I must have been about 12 then, or so – and he was out of camp. He was in an internment camp from the beginning of the war, you know, because of his nationality. He was convinced there wouldn’t be a war. I mean, he would say, ‘Well, you know, Chamberlain said “No war in our time”,’ and my father believed it.

AS: Like a lot of people here originally.

WS: And so he rescued me and, by the time I was 13½ I was a butcher’s apprentice.

MR: Did your father know English, because his father was English?

WS: Vestigial.

MR: So you know English then?

WS: Have you noticed?

MR: No, no, your English is normal, but in those days?

WS: Then? No, I didn’t speak any English. The only English I knew [was that] which I gleaned from Ian Gray. Are you familiar with that author? But that was in German.

AS: At 13½ then, you left school then, to do your …

WS: Well, there wasn’t school then. To all intents and purpose, I never went to school, you know.

MR: So was there much indoctrination then? I mean …

WS: I mean, yes, there was. There was an awful lot of indoctrination.

MR: Did you believe it?
WS: It just didn’t impinge on me. I mean, you’re 13 years old, you know. I mean, I regretted ... You know, when the Germans moved into Warsaw in 4 weeks, I thought that was absolutely wonderful, and then it only took them 8 weeks to reach Paris, and you know. I regretted bitterly not being German. However, when my maternal uncle came back from the Russian front sans one arm and the Iron Cross and he told us about what was happening, I was jolly glad to be English.

MR: Curious, isn’t it? Interesting ... It’s an interesting ...

WS: Farce.

MR: Yes.

WS: That’s how children think. Even adults think that way.

AS: And then, 1946 was it, that you came to Britain?

WS: Yes.

AS: And what precipitated that, and how was it arranged?

WS: Well, I think the British set up a thing called a ‘control permission’ in Berlin, and probably in other places too. And they said to my father, ‘You know, either you will be repatriated to Britain, or you will lose your passport.’ Well, my father was always very proud of his passport, he always liked to stand apart from the herd, and so we had some kind of family conference; my father consulted my mother, myself and my brother. And of course, by that time – Schumann and people like that – people were beginning to talk of a united Europe.

MR: Was your father born ... did he come with your grandfather?

WS: No, he was born in Germany.

MR: But he had a British passport.

WS: Well, if you’ve got British parents, you see, you’re British. I’m three-quarters German. And on the bloodline, one-quarter genuine British. You have to be satisfied with that.

MR: So you were in the British zone – you weren’t under the influence of the Russians?

WS: Everybody was under the influence of the Russians. Everybody.

AS: Because they got there first, didn’t they?

WS: That’s right. And who gets there first, gets there first.

MR: So you came to Britain then because that was an option.

WS: That was an option my father had, and he took that option, and we spent about – oh, I don’t know – 12 hours in London, and then we were shipped off to Scotland to a displaced persons camp.
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MR: Right. Where was that?

WS: Where is Scotland? It’s north of here!

AS: Which part of Scotland?

WS: We were just outside Glasgow, outside Paisley. Johnston. Between Johnston and Gourock; a place called Bridge of Weir. Or ‘Brigger Weir’ if you like – that’s what they call it.

MR: So that must have been another problem, because there you’re British in Germany and now you’re a German in Britain.

WS: I’ve always been a German in this country, and it’s a sort of preoccupation of the British.

MR: A professional German.

WS: Well, no, I haven’t made myself what I am; it’s my friends and colleagues who make me what they think I am.

MR: Well, I think I know that too.

AS: Well, when you first got to Scotland, then: what did you do?

WS: In Berlin when the Americans came, I worked for them; I was a kitchen butcher. And then when I came to Scotland, they wanted a cook, so I became a cook in this camp, you see. One of the things, when people – it’s a sort of thing of mine – when people ask me, ‘Can you do it?’ I always say, ‘Yes, I can do it.’

AS: And you said that your grandmother or your mother was a very good cook.

WS: She certainly was. My mother was a very good cook, I mean, heaven’s above!

AS: Did you learn from that, or when you started cooking in your camp, did you teach yourself or …

WS: I said, you know, I was a kitchen butcher for the Americans so naturally I picked up things to do with cooking, and I mean, after all, cooking isn’t all that difficult. A bit of this, and a bit of that. And so I was a cook in there. But getting out of there, of course, wasn’t very easy for my father and mother, especially my mother; she didn’t like it. It was a very cosmopolitan place, you know; they were there from everywhere. All over the world.

MR: So you’re in this camp; when did you actually get into normal society?

WS: Yes, well, what’s normal?

MR: I mean, when did you have a place to live again in a town?

WS: Out of the blue, my father got a letter – this is quite uncanny – from a lady called Toothill. And this lady, her husband was a one-time cashier with the Bank of England. His name was on the bank notes. He must have been a very busy man! And he got this letter out of the blue; my parents got this letter. And I mean, they’d never heard of Mrs Toothill, and she said some very nice
things in the letter and offered to put us up in St Barnabas Road. You know, to give us a start. But we’d never heard of this lady …

MR: Was this also in Scotland?
WS: No, this lady lived in St Barnabas Road in Cambridge.
MR: Oh right.
WS: It’s not very far from here.
MR: I don’t know Cambridge that well.
WS: Oh dear. And she very kindly put us up and gave my father a start. She had a son in the Royal Air Force, and he got shot down over Germany, and my father was part of a chain … in Berlin, and he’d operate this sort of safe house that put people up who wanted to get to Sweden or Switzerland.

MR: Your father did that?
WS: Yes.
MR: Well, this is an important bit.
AS: Yes, yes, you haven’t said that.
MR: Tell us about that.
WS: Oh, that’s the kind of the thing my father would do. It drove my mother crazy, but …
AS: And did you boys know about it?
WS: Well, yes, because I remember this young man, and I think he was sitting where you were sitting, and had dinner with us.
MR: So he was shot down in Germany and who got him to you?
WS: Well, I mean, people just picked him up and delivered him at our door.
MR: That was a very dangerous thing to do.
WS: It was extremely dangerous, yeah. And this lady always remembered that, you know. He must have told …
MR: So he found a route to get home?
WS: Oh yes. He got home but unfortunately we subsequently discovered that he got shot down again, and this time he was killed. That’s very sad. But she was, you know, you know what mothers are; and that’s how we got to Cambridge. Of course jobs were few and far between, but my father being a master butcher … He worked a lot of his time as a butcher for the Co-op, which is a thriving, or was a thriving, organisation in Germany.
MR: Were there other servicemen that came through your doors?
WS: Oh yes, various people came, yes.
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MR: Did you hear from any of those again?
WS: No. He was the only one. We never discovered how this lady managed to get our name and address.
AS: I was thinking about that.
WS: But she probably had a lot of, you know, her husband being quite an influential sort of chap, they probably found out something ... But that’s how we got to Cambridge; my father got a job at the Co-op, you know, because he worked for the Co-op in Germany amongst other things.
MR: So he was a butcher here?
WS: Yeah. Yes, he worked for the Co-op and then he was in Burleigh Street, up with this pork butcher there, I forget his name now.
AS: And did you, because you’d be, what, 16 then?
WS: Well, when I arrived here, I was 16.
AS: And did you then work, or did you go on at school?
WS: No, as I said earlier on, I never really had the advantage of a formal education. I then got a job in the University Arms hotel when we came to Cambridge.
AS: Cooking, or ...
WS: Cooking, yes. And by that time I’d learned a bit more, and you know, I was always able to ... Well, in those days, the thing to do was to knock on somebody’s door and say, ‘Do you want a cook?’ you know. And it’s not done any longer; you go to the Labour Exchange. But then almost immediately I was called up to do my National Service. And they have these places where they interview and they said, ‘What do you want to do?’ And I said, ‘Well, I want to join the Navy’ you see, because I wanted to get my [niece born?]. And so they said, ‘No, the Air Force is looking for cooks.’
MR: They didn’t want to make use of your knowledge of German.
WS: No, no. Perhaps they didn’t know; I never told them. And any way, my German wasn’t all that hot. When you’re 15, how much German do you know?
MR: Well, you speak pretty well at 15, but it’s a different language, isn’t it?
AS: Where were you posted to then?
WS: Well, I went to Innsworth, which is the RAF Record Office, and also the Number 2 School of Cookery.
MR: Do you remember your RAF number?
WS: Yes. It’s something you don’t forget: 2424531.
MR: I remember mine too.
WS: At times you bellow that out, when you get paid, such as it was.
MR: Yes. The last three.
WS: But there was a chap from, Italian background, contemporary to myself. And between the two of us we were teaching the teachers in the School of Cookery to cook. And I believe they still use my steamed pudding recipe. So, and, well then naturally onto the posting, after they trained me to be a cook, which I think took 8 weeks. And so, they posted me to the Middle East, which I liked very much, and I was issued my khaki uniforms and I had a ...

MR: Where did you go?
WS: I forget now, but somewhere in the Middle East, you see. But they fiddled my posting. They sent some other poor blighter to the Middle East called Smith. Smith is quite a common name in this country, perhaps you know? Perhaps not as common as Patel, but it’s quite well known. And they posted him to the Middle East, and I ended up in the Officers’ Mess in Innsworth.

MR: Because National Service was 2½ years then, wasn’t it? It’s still 2.
WS: No. 18 months.
MR: Oh, it was less? That’s right. It went up to 2.
WS: It started going down. It started off being 2, then it went down to 18 months.
MR: I did 2, but that was later.
WS: Serves you right!
AS: And did you enjoy it?
WS: Um, I’m ambiguous about it. I didn’t like … You do a thing called General Service Training, you know. That was near Manchester. I keep forgetting where it was. Alzheimer’s. No, it wasn’t Alzheimer’s, it was near Manchester! But anyway, I didn’t like that part of it, and I turned out to be quite a good shot. And they wanted me to go for this cross rifle status, you know, but I refused that. And did I enjoy it? Yes, there were aspects about it; the camaraderie and the messing about; rugby. And I learnt to play badminton there. I was very keen on that station. And it was, of course, the summer, we had this scrumpy, it used to be six pence a pint. We used to play the locals, play them at darts, you see, for scrumpy you see. And they would let us win, and then we bought them this … After one pint, miraculously they won every game.

MR: I mean, it’s stronger than beer, isn’t it?
WS: Yes, it’s an acquired taste; it’s very sour. But yes, it does knock you out. It’s amazing. Yes, one time I was really gone with it and I reached for that upright thing on the bus, you know, to jump on, and I went to jump on and I just missed it, and I ended up flat on my back. And that’s all I knew. And they sort of walked me past the guard house, you see. Of course they knew me in the guard house, but they kept both eyes shut, unlike Nelson, because being a cook, you see, I kept them supplied with eggs and bacon and sugar and tea.
And then, you know, they were dishing out 48-hour passes left, right and centre, because you know ...  

MR: So you were probably about 20 when you left there?  
WS: I think I was 18 when I joined, you see, so nearly 20, yeah.  
AS: And then what?  
WS: And then what? They kept the job open for me at the University Arms Hotel. They are very good employers. I don’t know if you know anything about them? The Bradshaws. Quite amazing. The Bradshaws started the Cambridge Building Society, amongst other things. They were very entrepreneurial. But they were two brothers, John and Mark, and this troop of Japanese walked in to the foyer of the hotel, and John Bradford happened to be about, and he just – he threw them out. Because then he was in the Cambridgeshire Rifles and most of them finished up, you know, in Japan. So that was edifying. But yes, I worked for them. But then because of the RAF, I got very interested in badminton, and I started playing it a lot, and I played it so much that the cooking interfered with the badminton, because cooking was a full time job and so I gave it up and got a job at Telecom, Pye.  

AS: At Pye’s?  
WS: And you know, working for, the Personnel Officer who gave me the job said, ‘What do you want to work here for? You’re earning more money than I am?’ Because, you know, they were good payers the University Arms, but I wanted more time to play badminton.  

MR: So what did you learn at Pye’s and what did you do there?  
WS: What did I learn at Pye’s? I went onto the assembly line. I think I was getting 9½ pence an hour.  
MR: Assembling what?  
WS: Communication equipment: receivers and transmitters. And then I became a charge hand, and they wanted somebody to do installations overseas. Initially, whenever the cook went home at Telecom, they asked me to do the cooking, you see. So they knew that I could cook, and they got this big contract in Pakistan, big communication multi-channel system, on a pipeline, on a gas pipeline, and so they asked me to go thinking that I could do the cooking, you see. Initially there was a radio survey, but I mean there are plenty of cooks in Pakistan, so I sort of graduated from that and eventually I did a lot of installations for them and finished up as project manager.  

MR: Right, so where did you install? Abroad?  
WS: Yes, mainly abroad.  
MR: Where did you get to?
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WS: Well, Pakistan, Persia – I spent a year there. In Egypt, another one. Ireland. Did quite a few ...

MR: So this was installing telecommunications or ...?

WS: Multi channel equipment, yes. You have a terminal station, you know, with repeater stations in the middle. This was ...

MR: So it’s radio communications?

WS: Yes, VHF. Multi channel, with teleprinter links ...

MR: Was this military or civilian?

WS: No, this was civilian: gas pipeline, in the case of Pakistan. In Persia, it was an oil pipeline. The Kharg Island Project was quite famous.

MR: That must have been interesting.

WS: Very interesting, yes. I found Persia very interesting.

MR: You went with your wife?

WS: No, no. I wasn’t married then. But the last job I did was in Ireland, and I took my wife. She’s a qualified secretary so she worked; I worked a scheme with the people at Telecoms that she could come as my secretary.

MR: So did you do evening classes on electronics?

WS: No, I never did any evening classes.

MR: You just learnt on the job?

WS: That’s right. There was always somebody who would tell me ...

MR: There’s a lot of technical stuff to learn.

WS: Well, yes, but there’s a lot of technical stuff here, but you pick it up as you go along.

AS: So then, after Pye’s ...

WS: By that time going abroad, and with these multi channel schemes you spent quite a lot of time abroad, that got a bit too much because by that time, the toddlers were coming; the children. And I really wanted to be around here, you know, to watch them ...

MR: What years were they, then?

WS: Well, that must have been about 40 years ago. I gave Telecom up and I got a job here.

AS: Now, who did you get your first job with here?

WS: Richard Adrian.

AS: Yes, so you were with him all the time?
WS: Yes.
AS: And that was based ... he was attracted to you because of your ...
WS: Pleasant face. And my German accent ...
AS: Your experience with ...
WS: Well, you had to fill out this form, you know.
MR: So was this an advertised post?
MR: And what were your impressions of him, first of all?
WS: Of Captain Taylor?
MR: No, who’s Captain Taylor?
WS: He was the owner of the Cambridge Evening News.
MR: Your impression of Richard Adrian?
WS: Well, he always struck me as being a gent. In fact, he was a gent. As a sort of central European, one has a preconceived opinion of what a gentleman is, you see. But then I came here and found out it was a bit different. And yes, he was truly a gent. Bryan Matthews was. Mr Secker Senior was a gent.
MR: Did you know, of course, Lord Adrian, the father, was around then?
WS: E. D. Adrian.
MR: And how did he strike you?
WS: Well, I played [unclear] with him because by that time, he was retired. But he did come once or twice to look at the lab and all that. And he had a word with me.
MR: Were the father and son very close?
WS: Well, look ... I mean ...
MR: You can say what you like.
WS: Yes, I know.
MR: It’s interesting for us.
WS: I’ll leave it. It’s difficult. Yeah, I treasure his memory and ...
AS: I get the impression actually that Anne Adrian – that’s Richard Keynes’s wife – that she was particularly close to her father.
WS: Yes, that’s right. But it’s different with boys. I mean, they got on famously, but I mean, E. D. Adrian, you know, he was an [OM], and Peer and Vice-Chancellor of the university, and I don’t know how many years he spent as Master of Trinity. And uniquely, Chancellor of Cambridge University, which is normally a
political appointment. And that’s a hell of a lot, however great a son you are, to measure up to.

AS: Where you here when E. D. Adrian’s lab was flooded by the visitor who was above him?

WS: Yes, yes, oh yes. I was here. In fact, I was scooping – I came in, it happened on a Saturday, and I came in and helped to ...

MR: What happened there?

AS: It was something to do with Jared Diamond, wasn’t it?

WS: It was flooded and the flood started in Glynn’s room.

MR: What, somebody left a tap on?

WS: No, no. Something – I forget now what caused it.

AS: Sorry, in whose room?

WS: In Ian Glynn’s room. That’s where the flood started. But it went down the ducts. You see, there are cable ducts and so on. It all went there in the downstairs corridor and we were scooping it up – Tom Slasser, myself and one or two others. And we were scooping it up with dustpans and into buckets.

MR: Did that damage the equipment?

WS: Some of it, yeah. But indeed, it’s very hard to damage electronic equipment with water provided you just wait and let it dry out. So it’s just a question of being a bit patient.

MR: So what was Richard Adrian doing? He was doing muscle recordings?

WS: Yes, he worked on the transverse tubule system, and on frog sartorius with microelectrodes. He started the electrode class up in Part II. And it coincided with my arrival here, and I was instrumental in setting, in making, the 12 places, 12 set-ups ...

MR: For microelectrodes?

WS: For the microelectrodes, yes, and the muscle baths and ... that stuff.

AS: And the bicycle ...

WS: Ah, the frog bicycle. Well, that came quite a lot later. That’s Bryan Matthews. Richard Adrian told me that Bryan Matthews had his back to the students in that big lecture theatre, I don’t know whether it’s still there ...

AS: Yes, it is.

WS: ... and he’d filled the bath with this so-called ‘frog bicycle’. And it was fiddly to get going, and he got it going, and he would then sort of go like that, you see, and there was this little wheel going round. And Richard Adrian told me about this thing – he was giving a lecture at the Royal Society, and he asked me to make one. I did a considerable amount of research. I mean, I visited Bryan
Matthews’s ex-assistant, who was a poor chap dying of cancer. There he was with his bottle of whisky, and he’d forgotten all about it. So I just guessed it.

AS: Who was that?

WS: I forget his name, now. That was Bryan Matthews’s technician. But he’s retired. He went over to Anatomy and spent most of his working life making furnaces. Breathing in all this asbestos. But it wasn’t that that killed him; it was some other cancer.

MR: So you made it up from ... you invented it?

WS: Well, no. I mean, Richard Adrian was able to give me a pretty clear idea of what he wanted. I mean, all the things here, an academic would come to you and say, ‘Can you make me one of those?’ He’d give me all the specs on the back of an envelope and you did it.

MR: I remember having a communication with him about tip potentials on microelectrodes, because he published it and I did some work where I smashed a thousand electrodes and recorded the tip potential, but that was very useful …

WS: Yes, that was all to do with the electrode. I mean, when Richard Adrian first arrived here it was customary to pull the electrodes by hand. And there was a chap called Nastuk, who was a Polish PhD student, with Alan Hodgkin, and he and Cook, I mean Nastuk again had the idea and got out his pencil and went like that, and Cook made the electron puller.

AS: Well, it’s still here because when Ron came, he went to see it.

WS: Yeah.

MR: So is that different from the Palmer, or did Palmer use that design?

WS: No, Cook’s design is unique, and in my humble opinion, it’s probably the best one. The Japanese didn’t do a very ... and a love of mechanical things, but this is very good because you can fiddle about with it, you see: you can make low potential ones, high potential ones, you know; thin ones, small ones. It was a very versatile tool and it was Cook’s genius. He didn’t get much of a mention in Alan Hodgkin’s autobiography, just an en passant. I think he said something about, ‘oh we got this brilliant instrument maker’.

MR: Yes, yes, I saw that. Yes, Ron mentioned that.

WS: But I think he deserved an entire chapter.

MR: Yes, well ... we learned a lot from Ron.

WS: So did a lot of people, including myself.

MR: And he was an expert on clocks as well.
WS: He’s a master horologist. He’s an expert on cars, electronics, switching, which is quite esoteric. And you know, he’s into Latin, Maths, into Russian, Norwegian, skating …

MR: Oh yes, skating. He did this, a lot of cross country.

AS: I mean, even this year when we had that cold snap, he was all ready to go.

WS: But it wasn’t cold enough actually.

AS: It melted.

WS: No, he was quite a remarkable man.

MR: So you saw him on a daily basis, did you?

WS: Ronald? Oh yes, yes. He was downstairs; I was upstairs.

MR: And you got on well together?

WS: Very well. I mean, he was, again, you know, he could be funny. Still is, you know. I don’t know how much he told you, but he could be funny. He worked at Pye.

MR: You mean funny amusing? Or funny …

WS: Funny both, I think. Yes, he had a very good sense of humour, but he could be … That’s French.

AS: Did you have your own workshop?

WS: Yes, yes, I did. I had – of course it’s all changed now – but I had a workshop next to Richard Adrian’s lab, there was a little room, squeezed in between Glynn and Adrian. And I had a workshop there, yeah.

AS: And what about the main workshop which is now no more?

WS: Well, I would frequently go down there you know, for help and advice. Especially in the early days, when Mr, oh dear oh dear, oh dear. Brian Secker’s predecessor. Brian Secker was Bryan Matthews’s technician, and when, they had this very much feared chap, Mr Hall was his name. He was in charge of the main workshop and he was a very clever man.

AS: But Brian Secker’s father was also here at one time.

WS: And his grandfather.

MR: Really.

WS: But it’s his father who is a 24 carat gent. I mean, he really is the most remarkable man; a wonderful chap to know. Yes, and then Brian Secker, and when I came, by that time Brian Secker wasn’t yet in charge of the workshop, but Mr Hall was. And he taught me a lot. Nobody could get on with him, and that included the head of the department, nobody. And he was very … But because of him being so very good at his job, you know. But I got on with him
famously. I just confessed my ignorance, and everybody loves teaching people. If you want to make a friend, ask them how to do a job.

**AS:** What’s very sad is that we have no workshop now.

**WS:** Yes. It’s not sad: it’s crazy.

**AS:** Well, yes, quite.

**WS:** Because the academics learnt an awful lot from the technicians, and the technicians probably learnt quite a bit from the academics. And if you go back, what are you, historians? Ostensibly: you look like them. If you go back into history, you find that a lot of the stuff, I mean, it was J. J. Thomson who invented the cationic graph [early cathode ray tube], just across the road here. And ... that enabled Bryan Matthews to make an electromechanical ... oscilloscope, which must have been ... one of the very first oscilloscopes in the world. And, Bryan Matthews, you see, he would have made a very good technician; he was brilliant with his hands. You know, he could do anything on the lathe. Andrew Huxley was another one.

**MR:** Yes, the Dalys were very good.

**WS:** Andrew Huxley had a strong bed lathe which he brought here, and he made the manipulator.

**MR:** Yes, at University College where I was, he had the lathe in his workshop.

**WS:** Yes. And there are people like that. And to do away with, you know, people who can be so creative, is just silly. But they’ll come back eventually; the technicians.

**AS:** What was ironic, was, that after they stopped our workshop and said that, you know, there were too many workshops, and we would use Experimental Psychology, the first thing Experimental Psychology did after all our chaps had been made redundant, and had found other, not very satisfactory jobs, [was to] advertise for workshop staff because they couldn’t cope.

**WS:** Well, I mean, they said, this young lady, you know, presumably a university leaver, came down to the workshop with her clipboard. I have this foible about people with clipboards – have you got a clipboard?

**MR:** Clipboard? No I haven’t got a clipboard.

**WS:** Thank God for that! And she said, ‘Oh, this is a mechanical workshop. The University has a perfectly good Engineering department: what do you want a workshop for?’ You know, she must have been at least 22! They then, you know, people would then go with their pencil and the back of their envelope, to the Engineering department and say, ‘Knock me up one of these.’ They’d look at it and say, ‘What are you talking about? We need a drawing.’ So, you know, and it cost £500 to produce the drawing, and £800 from the Engineering department.
MR: I know. That’s why they spend so much money now on stuff that we used to make up in the workshop. They now spend millions buying it off the shelf.

WS: But in those days you couldn’t pull an electrode puller off the shelf, could you? It had to be made by somebody like Cook. And it’s a retrogressive step. We’re being caught up in modernity. I know the University, they’ve been here for 800 years …

MR: But there won’t be the skills …

WS: I’m convinced that it will come back. There are all kinds of reasons, you know, why they got rid of the technicians. I mean, you know, they couldn’t get decent pay for the academics. What the academics are paid is lamentable, you know. Anybody in the City where they were earning £100,000, £200,000, £500,000 – and the professor would earn £40,000 in Cambridge. So of course, they couldn’t … Mrs Thatcher, she didn’t like academia, so they just couldn’t get the interest up, any money for decent salaries, so they got rid of the technicians and they gave the technicians’ money to the academics by upgrading them. You know, the University thinks we don’t notice these things, but … We might not have gone to school but we can work these things out for ourselves. But … I console myself with the fact that they’ve been here for 800 years and it will come out in the wash; they’ll be here for another 800 years.

MR: As well as Richard Adrian, who was your boss, who else … lots of post docs and students and …

WS: Oh yes, yes, because they were very interesting people. I mean, a chap from Japan came … Nakajima, I think. But Lee Peachy: I was very friendly with him.

MR: What do you remember about him?

WS: Oh, he was a wonderful chap. He was the cardiac fellow. He tried to get the different muscles lined up – he was an expert on the electron microscope.

MR: He was a cardiac physiologist?

WS: No, he was into muscle and into … Noble was the cardiac man at Oxford. He would come here sometimes. And Constantin – he was a brilliant – he worked on single fibres. He was brilliant; absolutely brilliant. Wonderful chap. Died very young of cancer. His wife, in America, eking out a living as a detective novel writer. But he had the patience of a saint, doing these single muscle dissections, which were very difficult. And there was Shirley Bryant. He was a wonderful chap. Do you remember him? He was a professor from America. He was absolutely wonderful. He brought these goats in that had this hereditary disease. You clapped your hands [claps] and the goat just collapses on the floor. And these snake oil salesmen, you know, in America, were selling the elixir of life, saying, ‘Look! Look at this!’ Give the goat a bit of the elixir and the goat jumps up again. […] He was the biggest anglophile I’ve ever seen. He absolutely loved anything to do with the English. He had, something went wrong with his suitcase, and he said, ‘Could you mend this suitcase for me incorporating some of E. D. Adrian’s equipment?’ Now, I had this hidey hole,
down under the stairs, so I got some metal or something, and I mended the suitcase, and he was ever so grateful. He brought three suits, a bicycle, and any number, anything, it had to be absolutely English, you see. He offered me a job; he wanted me to come to America and set up a lab for him, but I declined gratefully. Yes, again, you see, because the children were young and starting to go to school and they were choir boys, and every weekend [we went] to Oxford and back.

MR:  It’s a big dilemma isn’t it when you get these opportunities in life?

WS:  Well, yes. Well, one of Glynn’s ladies offered me a job. A Swiss lady. Again to start a lab; she’d got this huge sum of money in Switzerland to open a lab, and she offered me a job. And because I could speak some German, you know – enough for the Swiss, at any rate – and, but I was very glad … She was an organist, and she, instead of going back to Switzerland, she went, I think, to Burma or somewhere, to be a tea planter. Jolly good job I didn’t take her up on the job, isn’t it?

AS:  But now you’ve mentioned your sons and your music and things, can we go back a little bit about your family?

WS:  Yes, well … Benjamin came first, and then Charles, and then William. Benjamin, I know I shouldn’t say this, but he was quite bright and he got these scholarships, which was to us an absolute financial disaster. You know, he went to Christ Church at Oxford, ‘The House’, you know […] as a chorister. And of course he won a scholarship from there to Oundle, near Peterborough, as an organ scholar because he played the piano, the organ, the flute and, well he can play the telephone book, you know. He’s very musical.

MR:  Where does the music come from in your family?

WS:  Well, I play the wireless [i.e. radio], but it must come from my wife, and possibly, my father; he could play the piano by ear. He would hear a tune or something and he’d sit down and play it. But it certainly doesn’t come from me; believe me. But then Benjamin got this scholarship to Oundle because they were installing this Frobenius at Oundle – they’ve got lots of dosh, these private schools – and he helped voicing the organ. Well he’s still there, he’s a piano teacher. That was one school that didn’t cost us much because not only did he get a scholarship from Oundle, but he got a scholarship from the Cambridge County Council, would you believe it, to go to a private school. That’s quite a trick, isn’t it? But he got it on the strength that Cambridge County Council couldn’t come up with a school with an organ.

MR:  So why was it a financial disaster?

WS:  Well, because then came Charles. What are we going to do with him?

MR:  Ah, right. Okay.

WS:  So he went to Christ’s Hospital, and that’s not funny because they are means tested and that’s a financial death sentence. I mean, that’s awful. So that really made us suffer, and of course, we had to do something about William, and we
managed to squeeze him into Christ Church, just as his brother was leaving. William started as a chorister at Christ Church, and he got ... a bursary to Kings School, Ely, and I remortgaged my poor house, not once, not twice, but thrice.

MR: But now they’re all happy and doing well?

WS: Well, they’re happy, yes. As I say, he [Benjamin] is a teacher. He’s married to a violin teacher in Oundle, and George, my grandson, he is starting to play the violin, which I made for him.

MR: You made one?

WS: Yes, that’s what I’m doing now. I mean, you’ve got to do something when you’re retired.

MR: Well, that’s not an easy thing.

WS: I make violins and cellos and viola ...

MR: And did you learn that from a book, or ...


MR: So how did you learn to do ...

WS: Well, you get a piece of wood and ... No, I went to Hartington Grove. Juliet Beaman, who is Jimmy Beament’s wife, she likes to be called Juliet Barker. She went to Mittenwald, which is in Germany – only just in Germany, it’s on the Austrian/German border – and she learnt violin-making. And she started teaching it in the Tech. And I went to the Tech. I love calling it the Tech.

MR: Why, what’s it called now?

WS: Well, it’s a university isn’t it?

MR: Oh, they’re all universities.

AS: Anglia Ruskin University.

WS: It’s a university, but for me it’s a Tech. But anyway ... Anyway, I went to the Tech, and she taught me to make violins. And I still go there, actually. I go once a week.

AS: You say they haven’t got their musicality from you, but have you got a good ear?

WS: No, I don’t think I have. Because one of the things you do ... is, when you get towards the sculpting out the back or the front, the belly or the back, you pick it up at one corner, and you knock it, you see. And that, to me, sounds like somebody knocking a piece of wood. But to Benjamin, and my wife, because I tried my wife on it, and of course the teachers at Hartington Grove, you know, Juliet Barker and other teachers – she’s given the business over to her son. Jimmy unfortunately died – they knock it, and they say, ‘Oh, just a bit more’ you know. But, I mean, it doesn’t mean anything.
MR: I’ve often wondered about the wolf note.

WS: Oh yes, very nasty. They say most violins have wolf notes, but, you know, by changing the, fiddling around with the sound post, and the bridge and the, you know, the tightening and loosening the strings, and using different strings, you get rid of it.

MR: Do the larger, do the cellos, do they also have wolf notes?

WS: Yes, I think the whole line would do, yeah. I’ve been lucky, but it’s not important. I mean, a violin, as far as I’m concerned, is just a box. I mean, you pay £1 million for a Stradivarius.

MR: For yours?

WS: For mine? I’m an idiot, aren’t I, because I can go to a charity shop and buy a violin, a case, a bow, and duster, a piece of resin, for what – £45.

MR: I mean, the bow is expensive. Do you make bows as well?

WS: Yes, yes. But it costs me a fortune buying the wood and ...

MR: Oh yes, because ...

AS: Is it horse hair, the bow?

WS: Yes, it’s horse hair. Begging your illustrious pardon, from stallions only. And it’s white hair. Most of it comes from Mongolia.

MR: Really? Oh it’s not your ordinary horse?

AS: Genghis Kahn.

WS: Well yes, it’s nice and white.

MR: And long, I suppose.

WS: It depends ... I mean ...

MR: Does the thread go the whole length of the bow?

WS: Why, do you knot it?

MR: No, I don’t know if ...

WS: No, no, no, no, no. Good question. No, they just ...

AS: So you’ve got a workshop. Is it at Over your workshop? Whenever I ring you, you’re always in the wrong place.

WS: Yeah, well, I apologise.

AS: Or I ring the wrong number. So what have you got, at Over is it, your ...?

WS: Yes, I do things at Over ...

AS: What sort of a workshop have you got?
WS: Well, a thing I built for myself. Well, I built two. You’re not allowed to call it a – I went to the Council, you see, to find out where I am, and I’ve got these books. So I’ve got one shed for books and one shed for the workshop. I built them myself; the boys helped me. Some of it – they’re quite bit – they’re about 15 x 20; quite big. But everything is in a big muddle and ...

MR: How many instruments have you made?

WS: I don’t know. I made a cello; a full-sized violin; and a half-size one. I’m half way through a ¾ size one. I completed a viola. It’s a kind of thing … I can’t do it in five minutes.

MR: Is it a relaxation; the sort of thing you can do when you’re … or is it a worry?

WS: Well, my worry is that I’m too relaxed. I don’t need violin making to be relaxed. Inertia has always been a big problem of mine.

MR: There’s nobody waiting for the instrument, is there? Or maybe there is?

WS: Well, it’s just … I’ve got lots of jobs on the go; lot’s of things that I’m doing.

AS: You say you’re making one for your grandson?

WS: Well, yes, George – he’s playing now, and he’s playing a half-size one. It’s not really worthwhile making a quarter-size violin because you know you’ll never get anything good out of it, so you start with a half-size one. And then he’ll pass it onto Ted, who is his brother.

AS: And how old is he?

WS: He’d be about 5, I think. I think 6. George is 8. And then ultimately he’ll pass it on to Hatty, who is 3. She’s started playing a quarter-sized one, but then her mother is a violin teacher. Her mother plays with one of my violins. And so I shan’t live long enough to keep them supplied in string instruments.

AS: How many sons have you got?

WS: Three.

AS: Three. Yes. I remember when, was it the first one – was he the first one to go to the Perse?

WS: No, none of them went to the Perse. Benjamin, he went to the village school in Over, and Pat, my dearly beloved, that’s my wife, my better half, she taught him to play the piano, and she knows quite a lot about music and she said, ‘Well, this is no good. He really ought to go to a proper teacher.’ And there’s this nice lady who had just moved into Over from, I think she came from Burma, and she was an organist and a piano teacher, and Benjamin went with her. And she eventually said to us, ‘Look here, you know, this boy is very musical: you ought to do something with him, you know.’ So what do you do with a, you know, Beethoven is dead, so … So she said the best thing is to try and get him into a choir school. So poor boy, we hawked him around. He nearly got into King’s. I’m rather glad he didn’t because it’s a bit stereotyped
nowadays, so he got into, with Simon Preston at Christ Church. And so he went from the village school, as it were, into the choir school. We had to get some kind of thing from the village school, and the headmaster in the village school said, ‘Oh, Benjamin is musical? I didn’t know that.’ So he called in the music teacher and he said, ‘Mr and Mrs Smith are sending their boy to Christ Church. Apparently he’s very musical.’ And the lady, the music teacher, said, ‘Oh, I didn’t realise he was musical.’ So that was that. And then Charles, he was a bit of a flower and he really didn’t get on with the village school, and because of us being hijacked into the public school system, we then sent, Pat went back to work ... and we sent him to [...] St John’s. And William to boot. We put first William into Stags Holt, the nursery school, then ... school – I never got to the bottom of that one. They have these toddlers – do you know the Stags Holt School? At lunch time, after they’ve had their lunch, they are put to sleep. And the notion of Charles going to sleep; just unbelievable.

MR: But we used to do this.

WS: Yes, but they were all lying on the floor, either asleep or awake, and not a peep out of them. And there were these – I shouldn’t say biddies – these ladies, running the school, and I asked them, ‘How do you do it?’ And they didn’t know. They just sent them to sleep and they went to sleep.

MR: I vaguely remember that.

WS: So they both went to St John’s and then Charles went from St John’s to Christ Church; it’s a blue coat school. And there’s some family connection because they go in for the churchy people. My wife – I married above my station – my wife’s grandfather was the Bishop of Auckland, and there’s a certain College connection and at Pearson’s, the publishers, and all that malarkey ... But my father was a butcher. And so they went to St John’s and then Christ Church, and then William went from St John’s to Christ Church; Charles from St John’s to Christ’s Hospital.

AS: Yes. And at Christ’s Hospital, do they still wear the long coats and the ... 

WS: Yes. They used to come to Cambridge. When they came for their interviews, they would come to Cambridge in their button coats, they’re called button coats, and those were the button Grecians. They wore special buttons because they were the kind of boys who would go to university. And Charles became a button Grecian and the head of house, and, a transformation for him, and he went to university. Benjamin never went to university, but William did. He went to Manchester.

AS: And what did he do?

WS: Charles currently works for Audi in Germany, near Munich, Ingolstadt. Yes, they have an academy there and Charles teaches them sales, well, first and foremost, English, you know, as a consultant. Previous to that he was in Stuttgart working for Mercedes and Porsche. And then he went to Constance, he got tied up with this young lady. So he got the job in English working for
Audi, and he’s still with them. And William, he became a sort of globe-trotter. He’s been all over the world: Korea, China ...

MR: What, trotting or working?

WS: Well, no, he’s a bit ... he’s a thoughtful chap. He takes after my father’s lot. He spent most of his time teaching, quite often for nothing. For instance, he taught these Buddhist monks, you know, Tibetan [...]; he sort of globe trotted all over the world ...

MR: What, teaching them English?

WS: Yes. But now he’s in Cambridge teaching English, again at a language school, and he’s got lots of academic qualifications.

MR: Does he have a partner or wife?

WS: No, he’s got a Dutch girlfriend, who’s an academic. She’s a PhD student in Cambridge, at one of the departments. Works with worms.

MR: Respectable thing.

WS: I sort of clawed my way up from this displaced person’s camp into the middle class.

MR: I mean, back to your work with Richard Adrian: did you have much, did you have any contact with undergraduates, or was that ...

WS: Yes, all the time. Oh yes, I ran the Part II class.

MR: How did that go?

WS: Well, excellent. I taught them to do the electrode pulling and things like that.

MR: Any notable ones that have achieved?

WS: Again, there were some, there was one who you would know, so I’m not going to mention him ...

MR: Why not mention him?

WS: [...] Peter Stanfield.

AS: Oh Peter? Peter Stanfield?

WS: Yes. He was like my, again, like my father. My father was sailing very close to the wind because in my mother’s family they were all Communists, you see. My uncle, the chap who came back without an arm, he was a card-carrying Communist, and when the war started they told him either you go to a concentration camp, or you are a heavy machine-gunner. Now heavy machine-gunner is virtually a death sentence, you see, because they ride in front of the German lines; they take the brunt of the Russian attack. But he got away with it; he was machine gunned through the chest, lying in the trench suffocating, and this young Russian jumped into the trench, picked up the rifle with the
bayonet and went like that; stuck it in the centre of the trench, draped my uncle over the rifle so he could breathe, because he was suffocating.

MR: To help him?
WS: To help him, yes.
MR: Goodness. So he cleared his trachea?
WS: Yes. Yeah, he was suffocating; he was blue in the face.
MR: So he gave him ...
WS: No, no, no – he put the rifle in the sand of the trench, and the butt of the rifle in the other side, and draped him over the rifle, so the blood came out. The Germans counter-attacked and flew him back to a field hospital. He got not only – this is so crazy – not only did he get a First Class Iron Cross, but he got a Second Class Iron Cross as well. He got three or four pensions for being a political disadvantaged person and being injured.

MR: Did he remain a Communist?
WS: All his life. Yeah. Well, he paid for it, didn’t he?
MR: And we remember this, it was a particular date, wasn’t it?
AS: Well, yes, but we’ve come a long way from Peter Stanfield.
WS: Yes, he was a very nice chap, but he was a card-carrying socialist, and he, with some other people was interviewing this student at – Wilmer was his name, Professor Wilmer?
AS: Oh Wilmer – the histologist?
WS: Yes. He was a great gardener, you see. Yes, he lived in Granchester, but his college was Clare College, with the beautiful garden. It was Wilmer’s job to do the garden. A very competent gardener Wilmer was. But anyway, they were interviewing this boy and Peter was convinced that he could have made a brilliant physiologist, you know, by his records and by the interview he’d given him previously. And when the boy went out of the room after the interview, Peter said, ‘Oh, you know, we must have him. He’s absolutely brilliant; he’d be brilliant in physiology.’ One of the people, one of the interviewers said, ‘Well, yes, but would he be good at a cocktail party?’ And Peter lost his cool, and that was the end of his career at Cambridge. He went to Manchester.

MR: How ‘not cool’ was he, then? What, he swore at them or what?
WS: He told them enough to sour his connection with Cambridge.
MR: So what happened to the boy? He didn’t get the place?
WS: I’ve no idea. But I know that Peter did extremely well in … Leicester University.
AS: But unfortunately, more recently, there were various sorts of divisions in Leicester, and he moved off to Warwick.
WS: That’s right, yes. I know that, because we keep in contact over Christmas. And, but, I took all his stuff there for him, and the whole place was, the whole of Leicester campus was falling down. It was rather amusing. It had this concrete sickness. You know Queens’ College, this monstrosity facing onto the river? The whole Leicester campus is like that. You know, like gateaux, birthday cakes. And some of these horizontal striations; absolutely awful. And it was all collapsing, you know, with this concrete sickness. But Peter did extremely well. He did this patch clamping and he finished up very much at the top of his subject, and he got made a professor. His father was a probation officer and when we went there to celebrate his inauguration as a professor, his father took me aside, and I said to him, ‘Didn’t he do well? Isn’t this wonderful?’ ‘Yes,’ he said, ‘It’s very, very good. Such a shame it couldn’t have been Cambridge.’ Awful, isn’t it? Awful. Yeah.

AS: One thing I’ve got written down here: because it’s the 20th July today. Now when, in Germany, what did you know about the 20th July plot, or was it all kept from everybody?

WS: I don’t know about the 20th July now.

AS: The attempt to assassinate …

WS: On Hitler? We knew nothing. Nobody knew anything. I mean, people always ask me, ‘Did you know about the concentration camps, and you know, things like that?’ The Kristalnacht? Round the corner in the street where we lived, there was a dentist, and I remember, I was just a boy, about this high, but I mean that must have been ’36, ’37, I don’t know. But they were looting this dentist but I didn’t know why. All that passed me by.

MR: Did you know any Jewish people?

WS: Oh yes. My mother and grandmother were deeply involved with Jewish people, their friends. I mean, that Rheinsberger Straße just around the corner from us, walking distance, had one of the garment industry centres there. There was the garment industry, because my grandmother and my mother worked for Jewish firms. In fact, my mother nearly finished up in America because one of the young chaps wanted to go with her to America; he was Jewish. And, but it was terrible. He [Hitler] said he’d create a thousand year Reich, and he succeeded, because they won’t forget.

MR: They have little plaques in the ground that we saw a few years ago, the names of the people, like a memorial. Just a little brass thing like this, with the name of the person who lived there.

WS: What, in Berlin? Oh yes, but it’s terrible, you know. Christopher Isherwood and all that: I mean that’s the sort of Berlin I like to remember, though unfortunately, you know, I wasn’t alive then, but then the aftermath is just … I mean, the theatre, poetry, the visual arts, sculpture, music: everything was Jewish. And it would take hundreds of years to recover from that. And the irony of it was they would happily have picked up a gun and gone to war because they saw themselves as Germans, you know.
An interview with Bill Smith

MR: Well, in the first war ...

WS: They did, yes. And you know, there comes this Austrian corporal – he wasn’t even German – and all this happened. And it’s not the same. My father lost his business; well, we lost everything. We arrived in Scotland with a cardboard suitcase, you know.

MR: But you don’t have a Scottish accent.

WS: No. I’ve taken great care to conserve my German accent. I want a part of it. I mean, as I told you, I am three-quarters German.

MR: But we’ve always said that if there’s a critical age where, no matter how well you speak English, you still have – I mean, Otto Hutter still has his accent, and he came probably, before the war, but he was probably a similar age to when you came. And there’s a few like that: Feldberg.

WS: Oh yes. But I didn’t see any point in doing it, because I don’t mind having … I mean, I couldn’t help being born in the Charité. The Charité was run by Professor Sauerbruch, do you know him? He was a very innovative surgeon: he was the first to do open heart surgery. He was a thoracic surgeon and he was Hitler’s personal surgeon. He was a half Jew.

AS: Well at least you haven’t got a Geordie accent …

WS: Well, yes, that’s something to be grateful for …

Embarking on a walk round the department, they join Alan Cattell (AC).

AC: The fact that you just had to be inventive and think on your feet, and modify things, you know, just so that someone could get on with their experiment, you know? And it was the thrill of doing that, and being able to achieve that. You know, simply and inventively. I mean, some of my most enjoyable times were in the workshop with Willie. You know, different things that were going on, being made, ideas. In fact, he helped me make my first kitchen table when I first got married because the floor wasn’t level and I couldn’t work out how to get these things – being young and inexperienced – and William said, ‘What you need to do, my dear chap, is to make a cam on each leg so it will be level wherever you put it.’ And it worked a treat.

MR: And it’s probably still there is it?

AC: It probably is, yes. I got the table from Gatwick Airport, would you believe? A relation worked with, was remodelling Gatwick Airport, and they had all these tables to get rid of. And being so hard up when I first got married, we got one of these tables. And William came to the rescue to get it level. But just a simple thing, but that simple thing turned out to be the right way to go about it. And I’ve also remembered that cam theory. It’s come in useful several times through my working life.

MR: […] What happened to all the workshop machinery?
AC: It’s all gone. I got contractors in to bid for it, which was, as Bill said, peanuts. In the end I sold it to individuals.

MR: What, you had all blenders and guillotines …

AC: All sorts of things. The guillotine is now in Psychology.

MR: Oh, they’ve still got it?

AC: As part of this so-called streamline of workshops, I offered all the equipment to the central workshop, but no-one was interested; no-one wanted it. I mean, there were excellent machines: Bridgeport millers and Colchester lathes. I mean it was good quality machinery. I mean it was as tight when we got rid of it as the day it came in. I sold it mainly to individuals who wanted it at home. I did sell, I think, three pieces to one company at Ely, and they gave us a very good price for them. But originally, when I got the first person that came in to look at the whole workshop, I think they offered me about £1200 or £1300 for everything. So what was in there? Three, four milling machines; three lathes? All sorts.

MR: Plus a load of materials, I would have thought.

AC: Probably the best equipped workshop, obviously outside Engineering, in the university.

MR: I took photographs of that workshop way back, when was that, in the early 80s.

AS: Bill says he remembers a lady coming round with a clipboard. He never trusts anyone with a clipboard.

AC: She knew absolutely nothing about workshops. She was just going through the motions, really. She’d been charged with the task, but it was already cut and dried, I’m convinced. It was such a shame. But, you know, it’s now got no windows and it’s full of fish tanks. Before you go, I’ll show it to you, if you like. It won’t drive you to tears, I hope.

WS: Oh dear. What about Tom’s workshop, Tom Slasser?

AC: Fish tanks.

AS: They’re actually actioned are they?

AC: Well, the tanks are full but we have to get it designated by the Home Office, so we’ve got to do one or two little remedial jobs, but it’s …

WS: What are the fish going to be?

AC: Thirty thousand zebra fish.

WS: Zebra fish? So they’re going to change it from black and white to black and orange.

AC: Oh just whatever food they give them: flake food or dried shrimp. I’m not sure.

AS: They’ll probably eat each other if they’re not happy about the conditions.

MR: What is it about zebra fish?

AS: It’s because they’re transparent. And so all the developmental people love them.

AC: The cells are quite a nice size; they’re easy to breed, and that sort of stuff. And the development people really like them, so that’s why they’ve got so many.

MR: Isn’t that what they were breeding at University College? Maybe, it’s the ‘in’ fish is it?

AC: The one in America is, I think, much, much bigger than the one we’ve got. That one’s probably capable of 300,000 zebra fish.

MR: As a cook, what could you do with zebra fish?

WS: [Ron] Cook had a brilliant sea aquarium, salt-water aquarium down below: absolutely brilliant. Worked very well. That was broken up. But I suggested, I said to the professor, because Cook was teaching me to look after the aquarium, but I am leaving, you see. And Glynn asked me to write a report on this thing, sort of feasibility study. And I said I’d do that. And it got vetoed, you know, and they said … And I asked him, I said, ‘Isn’t it a shame?’ One of the things I suggested was to make a big hole in that corridor down below and build an aquarium into the wall and illuminate it, you know, for children and visitors to go by it. I thought it was a splendid idea, you see. So I said to him, ‘What a shame that didn’t come off.’ And he said, ‘Oh, we’re not Zoology, you know.’ And so it was only a matter, a couple of weeks after this that somebody, that the department, the Zoology department, they won some big award or something, you see. And when I came across Glynn again, I said, ‘What a shame we’re not Zoology!’

AC: I can remember those tanks. They were in good fettle those fish.

WS: Yes, once every two or three years we used – I used to help him – he used to re-putty them, and they had this half-inch thick glass, which bowed outwards, because you know glass is a liquid.

AC: Didn’t you go off periodically and get sea water from somewhere?

WS: Yes, we went to the seaside with a pump in a white van, you know. And pumped this sea water in these polythene containers. And this lady came along the beach with a dog and she walked up to Cook – I was up to my knees in water – she walked up to Cook and said, ‘Have you got permission to do that?’ It was the North Sea! Four-fifths of the world is covered in water. ‘Have you got permission to do that?’

MR: They don’t like you taking stones from the beach.
WS: I know, but, you know, sea water. Cook: I don’t often see him nonplussed but believe me ... that stymied him. ‘Have you got permission to do that?’

AS: Now we’re going to go and look at the electrode puller, and we’ll go down and see Chris ...

WS: I’m on a conducted tour!

AC: Well, things have changed a bit, but I mean the geography is pretty much, you know ... When did you start?

WS: When did I start? It must have been ... I mean, when did I retire? I’m 80 now.

AC: Never!

WS: On September 2nd I’ll be 80, so I must have retired 20 years ago.

AS: As long ago as that?

WS: Well, 15 years ago. And 15 plus 30 is 45. Forty-five years ago I started here. I was here nearly 30 years.

AC: I can beat you. I’ve been here 40 years, last Tuesday. I started on July 14th, 1969. And most of it’s been pretty enjoyable, I have to say.

WS: Yes, yes, I had a good time. I mean, mainly because I was always doing things that I couldn’t really do. You had to apply yourself, you know ... I enjoyed every minute; it was very nice. And working for Richard Adrian was an absolute pleasure; an amazing man.

AC: [Coming to the ‘frog bicycle’] Do you remember this?

WS: Oh dear, oh dear, oh dear. That takes me back.

AC: That moves, so be careful.

WS: Well, I made it.

AC: I know you did! Its a little muscle motor, isn’t it?

WS: Yes, that was Bryan Matthews’s idea. The frog bicycle. But you see, I made a mistake: Can you see this? R. H. A.

The frog bicycle photographed in Alan Cattell’s office in 2015.

AC: No, I didn’t see the H.

WS: That’s the H, you see?
AC: Did you see the H, Ann? Did you see the ‘H’ in this? You know the little motor that Bill made, that we had on display? I saw the R and the A. I never saw the H. Because it’s R. H. Adrian.

WS: Richard Hugh Adrian.

AC: Bill just pointed it out. He should know; he built it, but …

AS: Yes, but it caused a lot of interest.

AC: I think it’s marvellous.

WS: Are you looking after it?

AC: I am, yes.

WS: Some time, I’d like to modify this.

AS: You want to steal a piece of zinc, don’t you?

WS: I’ve got the zinc. No, I didn’t steal it. You know they’ve built this ridiculous boat-shape loo.

AC: Oh, on Chesterton Road?

WS: And I drove past there, and I nearly had an accident. I thought, ‘This is amazing; whatever is it?’ Pat and I, you know, were on business then, but I stopped and said, ‘What are you building?’ ‘Oh,’ he said, ‘It’s going to be a loo.’ And some disposal thing as well. And they’ve got this boat shape at the top, and it’s absolutely magnificent. Of course they spoiled it by painting it this awful colour, what’s it? Orange or something. Surely they could have thought of something better than that. Anyway, I said the roof is really intricate, and the foreman whom I talked to – really nice chap – he said, ‘Yes, it’s all very well for the architects but, you know, we’ve got to do it, you know?’ And so I said, ‘What are you going to cover it with?’ ‘Zinc.’ I said, ‘No, you’re not going to cover it with zinc!’ I said, ‘I couldn’t have a bit, could I?’ ‘Well no,’ he said, ‘but the roof is not here, but it’ll be here in four or five weeks’ time: come back and I’ll let you have a bit.’ So I got two big bits like that. I want to change, dear oh dear. You see, I made this all silver and, because we were used to making everything from silver and so it was made from silver. But what I should have done, I should have done the contacts from silver and zinc. Yes, you see? There are two bits, you see? And when the cam comes down, that opens it up at the bottom bit and that brings out a bit of electricity which makes the muscle twitch. I don’t know what the hell these are for.

AC: That’s where the nerve was. I think the muscle was …

WS: And the nerve was hanging over there. And how did I stretch the muscle, if it’s that slot? And the pin, that’s right. And the pin in the slot. It’s all coming back to me. At some opportune time – does Chris still work with frogs?

AC: Chris Huang? Yes.
WS: When I took this to the Royal Society, or the British Institution [Royal Institution], or whatever it was, they said ‘Oh its nice, look at this ebony.’ So yes, I’d like to change one of these contacts to zinc, but I’m not quite sure if ... It really needs Chris to help me with it, because I’m not quite sure where it is best to put the battery here ... oh dear ... the frog bicycle. You see, we had it going for something under a minute, which is a long time, but it must have been the residual copper in the silver that made it go. You see, you’ve got to have a dissimilar metal. But the best, since I saw that roof, and when I got that zinc – I said ‘How much would you like for this.’ They’re just off-cuts. When I saw that it occurred to me that I made a mistake between Galvani and Volta, you see. And I used the Galvani principle; I should have used the Volta principle, because Volta proved that the electricity is external, from the outside, not from the frog. So, yes, that’s right, and so that’s what he tied the sartorius to. I think it might be worthwhile to do that. I think it’s worn quite well, hasn’t it?

AC: It sits on my desk.

AS: And gets admired. By discerning people.

WS: So Chris let that go?

AC: Well, he gave it to me for safe keeping.

WS: I mean, this is nothing to do with me, but it would be nice if it remained within the orbit of the university.

AC: Well, it’s not going anywhere as far as I’m concerned, but ... 

WS: You were telling me about this lady who runs the museum ... there’s this lady who runs the museum. Didn’t you tell me there’s somebody who has got a museum in the university?

AS: No, we went to the Whipple to get something but ... 

WS: No, it’s not the Whipple. Somebody came to Richard Adrian and photographed this and said, ‘Oh, that’s very nice,’ and I think it was a lady and she very much had her heart set on it. And he said to her, ‘Well, I’ll leave it to you in my will.’ But of course that got nowhere ..., but I would like it to remain here, if possible, because nobody goes into the library and reads Richard’s papers, but this thing, this would be some kind of immortality.

AC: The Archive Committee has now been sort of resurrected and I think the lead individual, Roger Keynes, is a little bit more focused on getting things done. So we’ve got various bits and pieces in train to put up, so it’s this sort of thing that would be very interesting to have in his display cabinet with some history about it.

WS: You see, this was done, you see Alan could tell us. Bryan Matthews’s assistant, before Brian Secker ... he was a keen hunter, and gunsmith; he worked in Anatomy and made all these furnaces, breathing in all this asbestos for decades. He died of cancer, but not lung cancer. [...] I went to see him; he was
An interview with Bill Smith

terminally ill with cancer. I wanted to pick his brain. He just could not remember it. You see, Richard Adrian told me, Sir Bryan used to be in that big lecture room down below with his back to the audience, and he fiddled with the thing, and eventually he would stand up and walk, and stand on the side, and there was this wheel going round. So it became known as the ‘Frog Bicycle’. This was before the time when he started doing the ear, the famous ear, you know. You know about the ear?

AC: Which lecture theatre do you mean?

WS: The really big one.

AC: The main lecture theatre? Right.

WS: Down below. Yes, he used to demonstrate that to the students. And that would have been just, you know, a rough and ready thing. But I went through a certain amount of trouble with this because that went to the British Institution [he means the Royal Institution], because I’m a great fan of Michael Faraday. Michael Faraday was another amateur such as I. Everything empirical about him. And he achieved considerable fame. He was a book-binder, you probably know ... His father was a blacksmith; he was a book-binder. And he was very keen on science and went to Sir Humphry Davy’s lectures, which were just across the road from the book bindery, and he took the lectures down in long-hand because short-hand wasn’t thought of in those days, and he wrote them up and then, being a book-binder, he bound them and when Sir Humphry came into the book bindery for some job or something, he presented it to him. And when Sir Humphrey’s glass-washer retired, or fell ill or what, he offered the job to Michael Faraday, as a glass-washer. And they became great friends, but then when Michael Faraday on his own account became justly famous, they fell out a bit. So what’s new?

AS: Jealousy.

WS: Yes. But Michael Faraday, he distinguished himself from a lot of people by not wanting any more money. They tried to give him .... The King ... offered him money. He [always] refused it. But in the end, when he was an old man, the King forced a pension on him. You can’t see that happening now, can you? With our MPs and the great and the good, perhaps not so good. So this is why I made an effort because I felt I was going on sacred ground, you know. Going to the [Royal] Institution.

MR: It must have taken quite a while to construct?

WS: Oh, at least 5 minutes!

MR: Oh, a bit of filing on it ...

AC: It won’t leave this department, Bill. Only if you want to take it away.

WS: I might talk to, well the thing to do is to talk to Chris, you know. If he can spare the time, you know, I would like to take it home and look at it, and think about it, and I’ll put this thing in. What you do is you take a little piece of silver, and
you put it in linen, just in between. It can be paper, but I mean linen would be more durable. That’s to store the saline. And then the zinc on top, and that gives a terrific impulse, and it would be nice if we modified that, because then Chris could ... demonstrate that.

AC: Well, we do static demonstrations, [that] is what we usually have, don’t we? Get a video, yes.

WS: Oh dear, I’m going to cry now.

AC: Sorry, Bill.

WS: I mean what happened to the electrode classes. Is that still going?

AC: In a form, yes.

WS: In a form?

AS: Well, if we have one of those afternoon open day things in March, or something.

AC: We could do it then.

AS: That would be real physiology.

AC: We could do it then; that would be a good idea, yes.

WS: But if it remained within the orbit of the department, I would be very grateful.

MR: No, it definitely will.

WS: And I’m sure Lucy would too [the widow of Richard Adrian].

MR: Was there a prototype? Or is this the one?

WS: No, the prototype was up here [tapping his head].

AC: Right. I shall look after that, William.

MR: Nice to see you again.

AC: And you, and you.

Going into the office of Paul Frost:

PF: Nice to see you. Still surviving?

WS: Only just. Only just. How’s it all going?

PF: Barely recognise half your workshop here?

WS: Mine was smaller. I think some of it’s here.

PF: Somewhere there, yeah.

WS: Yes. So you’ve got 50% more? Good for you. But it has a Frosty look about it, if I may say so. You’re still cramming it in.
An interview with Bill Smith

AS: Paul, can we look at the electrode puller when you’re …

PF: Oh, they still exist. Still with Bill’s modified labels that he’d put on them. Changed it from ‘puller pip’ instead of ‘pip puller’ R.H.A.

Continuing their walk around the building.

WS: This used to be Glynn’s office, didn’t it?

PF: At one stage.

WS: But what happened to the lecture theatre?

PF: Well, that disappeared years ago.

WS: There used to be stairs down here with tiny little steps.

PF: This bit, basically, where was it?

WS: Oh, this is where you have the class?

PF: Yes, this is my classroom, about half the size, quarter of the size if you consider the ceiling height.

WS: Honey, I’ve shrunk the kids.

PF: Practical is no longer compulsory, only optional.

WS: Do you get many customers?

PF: Well, fortunately one or two of the projects, the supervisors insist that they go off and do some of the practicals as introduction to the techniques they’ll be needing.

WS: Oh dear. Well, that is amazing. So you’ve got one, two, three, four, five places?

PF: Six. We brought them all – we had an interim period where we stopped on the second floor.

WS: You moved the bricks as well?

PF: Yeah.

WS: Amazing. That is absolutely amazing. Well, I’m glad it’s still …

PF: All those base plates that you used to hump up and down the stairs, they’re actually all hidden underneath the tops. So you just have to take the top off and there’s the base plate.

WS: Good! Oh dear, oh dear; those were the days. Yeah, looking good.

PF: I find it all a bit sad.

WS: All of it, it’s changed, hasn’t it?

PF: Too many students, don’t get to know any of them.
WS: And here are the pullers?

PF: Yeah. There they all are, Bill. One or two have still got R.H.A. on them.

WS: Good heavens.

PF: You changed the label on some of them and put P.I.F., my initials, instead.

WS: Well, it’s wonderful. It’s different.

AS: Next stop, Chris, then, if he’s there …

WS: He’s down below, is he? Well Paul, it’s been such a pleasure seeing you. How are things in Littleport?

PF: Oh yes, we’re still surviving in Littleport.

WS: I was going to ask you: what are you into now?

PF: Fishing.

WS: Fishing still? Oh dear, that must be a record. This is a most remarkable man: everything he takes up, he suddenly becomes a champion at it. He’s a champion badminton player; champion cricketer; now he’s a champion fisher …

PF: Too old for any of them other things, so I just sit on the riverbank.

WS: But you used to be Mr Cricket in Littleport. You were the man for cricket. Where’s my ‘head room’ sign? That’s gone. I put up this funny sign. And my pictures? They’ve gone.

PF: No, they haven’t disappeared.

AS: What was that one?

PF: There was a picture there of …

WS: The muscle ones.

PF: Is that one up there? Put away safely so builders couldn’t get to it. With Stanfield, Crawford, Rob Starling …

WS: Oh dear, yes. Don’t worry. So this is amazing.

AS: I didn’t realise that Peter Stanfield was a raging communist.

WS: No, he wasn’t a communist; he was a socialist.

AS: Oh, socialist, yes; not a communist.

WS: A card-carrying one, and he was very ardent. He was a good chap.

AS: Yes, I liked him.

WS: So did I. Yes. He was very much into Chamber Music. He introduced me to it. When I was a boy, there was only two kinds of music: jazz and Beethoven. That was it. I thought, you know. Are these the stores down here?
PF: No, it used to be, but ...

AS: The Library overspill.

WS: The Library overspill.

AS: Yes, because all the good things went over there. The stores went over there; Accounts went over there; our secretary went over there.

WS: Oh dear, oh dear, oh dear. Yes, a massive change of power. Oh, this is the superintendent?

AS: I should think Chris, if he’s in, will be our last call. I’m lost now. Your wife must know a lot about ... Chris is down here, if he’s in.

MR: Is this where the main workshop was?

WS: Yes.

Reaching the room of Chris Huang (CH).

WS: So what’s new?

CH: Not very much.

WS: Not very much? Well, everything looks new.

CH: Yes, sort of.

WS: Sort of? Dear oh dear. I couldn’t find my way around. Absolutely amazing. Alan Cattell showed me that frog bicycle. Remember, you and I, we made that?

CH: Yes. He has it at the moment.

WS: I tried to tell you on the phone, I mixed up Volta with Galvani, in my stupidity. And I managed to get a bit of zinc of the roof of the public lavatory by the river, you see. I know you must be very busy, but I really would sometimes, you and I get together and get it going.

CH: Okay, yes.

WS: Because you know, since then I’ve done some research and I’ve done some paperwork ...

CH: I’m assuming Alan still has it?

WS: Yes, I’ve seen it. He showed it to me. If you ever have the time – not in the immediate future – but I’d like to ...

CH: Just to see whether it really does work.

WS: Do you remember we had it going for nearly a minute? Excuse me, I’m ... but there must have been some of the residual copper in the server; that’s why it was going. By the time we got it to the British Institute [Royal Institution], it was a flop. My fault.
An interview with Bill Smith

CH: We can go to the British Institute again …

WS: Oh dear, please … Wasn’t that awful? How much did I pay for that bottle of water?

CH: Yes, you insisted on Perrier water.

WS: Dear oh dear.

CH: Are you here tomorrow, Bill? Are you here only today?

WS: Only today. You can contact me, I’ll talk to a friend of mine, I’ve collected a few bits of paper and I’ve been thinking about it. And now today I’ve seen it. All it needs is some genius, like you, to produce the muscle. It needs playing around with. But I’m now convinced it’s going to work.

AS: We’re off to see zebra fish.

CH: Yes. Thanks for calling in. We’ll catch up again.

Continuing their walk around the building, joined by Alan Cattell (AC).

AC: So there you go. Can you remember what was here before?

WS: Yes … The original workshop.

MR: Where are the actual fish? I don’t see any fish.

WS: Are they in all these little boxes, Alan? They’re fish tanks.

MR: Are they transparent? You can’t see them.

AC: They’ve got no fish in at the moment, because we haven’t got designation from the Home Office. So we’re waiting for that process to go through, you see.

WS: Well, you couldn’t get much of a trout in that, could you?

AC: Not much, no.

MR: Now do they come in little plastic bags? Or do you just get one or two and breed them?

AC: We breed them, yeah. No, we’ve got a fish room over in the Anatomy building, and then we’ve got to migrate from there over to the quarantine room, and then we’ll breed some stock from there, and then they come over here. This is the advantage of this system: the tanks are at the zebra fish temperature, okay, but the room is controlled so that it’s nice and comfortable for people who are working in here.

MR: Oh, does it have to be warmer for them?

AC: Yes, I think it’s about 26 or 27 degrees that they need, whereas [with] other systems, the actual room is at that temperature, which is very uncomfortable.
MR: This much cost a bob or two.

WS: It looks very expensive.

AC: A few hundred thousand.

WS: You could pay a lot of salaries with that.

MR: Salaries for fish? Not as much sawdust as there used to be.

WS: No, there used to be a lot of sawdust in here. And Leslie Hatton – a wonderful chap, Leslie Hatton.

AC: Did you know that Les died recently?

WS: Yes, I did. Some time ago.

AC: No, not very long ago actually.

AS: About a month ago.

AC: Yeah, about a month ago.

WS: Oh dear. Well, he was the most wonderful chap, but he had this cancer. And they treated his cancer when he was a young man, and he must be what, 80, when he died?

AC: Over 80, I would think.

WS: And they cured the cancer with x-rays, but of course, this was yonks ago, so they overdosed him and they burned a hole and they put a huge patch on, you know. And just before he retired, something went wrong with his voicebox, and he had to have a tracheotomy. I modified it for him.

AC: Oh, did you? I didn’t know that.

WS: Yes. He came in and he said, ‘Oh Bill, could you do that?’ It was silver, of course, you know I had silver. And it required some modification to make it more comfortable for him. And he said, ‘Thank you very much.’ And he went like that – ‘How much do I owe you?’ That was Leslie Hatton. He was a genius; he could do anything: electrician; glass-blowing; building; woodwork. And they let people like that go, and that just ruins it.

MR: And there’s nobody they’ve trained to ...

WS: No, exactly. They could have learned so much.

AC: That’s what Paul and I were just saying, because Paul and I are the last of that sort. Properly trained technicians. And there’s no-one else to follow on. We were saying that we need, we ought to think about this, because they’re not going to be able to do this, bits and pieces ...

AS: Multi-tasking.

WS: That was a part of Brian’s empire; that’s where he had his blender. And what happened to Matthews’s grandson – is he still here?
AC: Hugh is still here, yes. But Trevor Lamb is no longer here. Hugh Robinson’s downstairs. We modified the labs there for his people.

WS: Amazing. Well, thank you very much.

Continuing on their walk.

WS: This under the stairs – that was Alan Hodgkin’s hidey hole. That’s where he kept a lot of his old gear; equipment and microscopes and piles and piles of E. D. Adrian’s stuff. That’s how I got the bits of metal to do the suitcase.

AS: It’s been a really interesting afternoon. [...] Thank you very much indeed for coming. It’s been a super afternoon.

WS: My pleasure.

MR: Yes, we enjoyed it. We all enjoyed it.

AS: We learned such a lot.

WS: Good. Well, I hope to see you again.
An interview with Bill Smith

Bill Smith with Ann Silver and Alan Cattell by Martin Rosenberg.