NATIONAL LIFE STORIES

AN ORAL HISTORY OF BRITISH SCIENCE

Janet Thomson

Interviewed by Paul Merchant

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<table>
<thead>
<tr>
<th>British Library</th>
<th>National Life Stories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview Summary Sheet</strong></td>
<td><strong>Title Page</strong></td>
</tr>
<tr>
<td>Ref no:</td>
<td>C1379/20</td>
</tr>
<tr>
<td>Collection title:</td>
<td>An Oral History of British Science</td>
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<td>Interviewee’s surname:</td>
<td>Thomson</td>
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<td>Interviewee’s forename:</td>
<td>Janet</td>
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<td>Occupation:</td>
<td>Geologist, British Antarctic Survey (BAS)</td>
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<td>Teacher</td>
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<td>Interviewee’s home, Thornton Rust, North Yorkshire</td>
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<td>Dr Paul Merchant</td>
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**Interviewer’s comments:**
Could I start by asking you where and when you were born?

I was born on – just over the border into Staffordshire from Dudley in a place called Sedgley in December 1942.

Thank you. And would you be able to tell me about your first – the first house that you can remember?

Yes, we lived in it until I was nine and this was a semi detached house, hmmm, in Amblecote near Stourbridge in Worcestershire and my father had bought the pair of semi detached houses and so he let out the one side and – and we lived in the other. It was a – I think that they had bought it new during the war which is unusual that it should have been built at that period, but maybe they’d started it in, you know, before the war and they were just finished off. But my parents were separated so I don’t really remember very much about my father, he just owned the house and eventually sold it and we moved away to Berkshire after that.

You and your mother?

And my sister.

So you moved to Berkshire at nine?

Yes. I must admit I did like – I liked that house that we – we lived in because it was very near the end of a cul-de-sac and it overlooked open fields to the railway with coal mining, you know, the old [makes train sound] [laughs] sound of the – the coal wagons going along on the horizon but the – the garden was lovely and it dropped down through several terraces, in fact our garden here is a bit like it because it’s got – it had dry stone walling to … support the – the slope of the land and was all on different levels so it was a good place to play in, fairly wild.

[02:11]
Could you say a bit more about the wildness, describe – describe the place from a child’s point of view?

Well it was very formal at the top, near to the house, and then it went down through some stone steps and through a … a gate at the far end where it was all very overgrown, you know, brambles and sort of tree seedlings coming up and then you could get through that, somewhat illegally I think [laughs], into a field with big trees and then that went down to a little stream and on the opposite side of the stream there were buttercup meadows, I always remember these buttercups, you know, they would be up to my shoulder and we had a Scottish terrier and he didn’t like going for walks in the high grass, he liked to have a path to follow so he wasn’t – he would disappear out of sight and you’d just see the tip of his tail going through these buttercups, but it was just being – having that freedom to – to roam within safe territory, really I think, in the garden and then with my mother and sister, or just my sister, you know, going out into the fields beyond.

Do you remember the sorts of things you did when you went out there?

Not really, I think we just rambled around. I remember once when we had been out taking our dog for a walk, just my sister Pam and me and we found a – a dead mole on the path, and we didn’t know what it was so Pam picked it up and put it into her handkerchief and took it home and showed it to mum and all the fleas that had been [both laugh] on the mole had come out onto the hankie, my mother went absolutely berserk and she said, ‘Don’t ever do that again,’ [both laugh], but at least we knew what a mole looked like [laughs].

Did – and your sister Pam, was she older or younger?

Older. By three and a half years.
And did this – this first house that you can remember that you lived at up until the age of nine, did you have sort of local friends?

Hmmm, not really. My mother was a bit of a snob and she didn’t think that the – the children around were particularly suitable, when I was old enough to go to school she also became a teacher at the school, it was a private school where my father had sent my sister so all three of us used to go off and being – this was in Stourbridge so it was about two miles from where we lived I think, and most of the pupils were from villages around but not near where we lived, so any school friends – so it was quite a – a trek by bus to go into Stourbridge and then out again to a different place to – to play with them at weekends, so I don’t think, you know, I had very many playmates around locally apart from my sister.

And do you remember what your mum would say about the children that she regarded as not suitable for you?

[Pause] No I don’t actually, hmmm … it was – I suppose it was, you know, she said, ‘No, you don’t go and play with them,’ [laughs] and that was it and one – one didn’t. Because they weren’t at the same school, you know, it’s difficult to get introduction, one didn’t play in the street so, you know, it was a question of going to somebody’s house and there were not that many children of our age in that particular road. It’s curious really, but I think we probably always have been a bit of a … an inward looking family in that – that respect, ‘cause even my sister, who was a very outgoing person, didn’t have any friends locally, they were only school friends from other villages.

[06:39]

Starting from the – the front door, could you describe the interior of that house, sort of take us on a tour of the rooms?

Right, well it was a – a typical semi detached house, you went through the – the front door and the stairs were on the left up – to go upstairs and there was a – a sort of long narrow passage to the kitchen at the back, and then the dining room was the front
room on the right and the lounge was behind it. The lounge had French windows and there was a glass extension that went the whole length of the back of the house on a step down from the kitchen, and my sister and I had our doll’s houses out there so it was a sort of playroom. And there was also the coal cellar and my mother had an amazing fridge, we refer to it as the Dalek in later years because it was a huge thing, a bit like a – a butcher’s fridge, on legs, and it had its cooling dome right on – on top and she used to air the clothes on top of that [both laugh] which I don’t think was a very good thing to do. So it also had a table and chairs so that we could eat out there in the summer. And then on the far right at the back there was a door and steps down to the first terrace of the garden and then a few more – which was crazy paving, and on the left side of that terrace there was a side door into the garage. And then you started to drop down onto these various terraces in – in the back garden. Upstairs there was a bathroom at the back, at the head of the stairs, and then there were two reasonable sized bedrooms on the right and a small bedroom at the front, over the – the hallway, which my brother had when he was at home.

[08:47]

So I had a much older brother but he went away to public school when I was four and a half so I didn’t really know him particularly well.

*How much older was he than you?*

Eight and a half years.

*And how much older was your older sister than you?*

Three year – three and a half.

*Three and a half, hmmm.*

[09:06]
Do you remember anything of the way that the house was decorated or made sort of unique?

Well my mother had sort of chintzy loose covers on the – the three piece suite and I think she had some dark green velvet curtains in the – in the [laughs] dining room but I don’t actually remember very much more about it. In the kitchen it was a gas cooker and she had a – a dresser with an enamel top that pulled out so that she could use that as – to make pastry on, baking and things. And she had an intriguing cupboard above that where one of the doors opened and there was a little enamel shopping list device on the inside which had a whole list of things that you might need, like tea and rice and biscuits and sugar and things, and there were little metal clips that you flipped over and there was red on one side and white on the other, so when it was red it meant that you needed something, used to love playing with that so [laughs] it probably affected her shopping list rather [both laugh]. I’ve never seen anything quite like it before or since. But it was a very narrow – it was a sort of galley kitchen really. Hmmmm, don’t remember a great deal else about the decoration … no.

[10:43]

You’ve – you’ve mentioned the – the Dalek, was there anything else in the house that as a child up to the age of nine you regarded as being modern, as being sort of – wouldn’t – you wouldn’t have used the term then but high-tech or the latest thing technologically?

I don’t think as a child you would really know about that because if it’s there you just accept it as part of life and – and we didn’t visit that many other houses so, you know, it just became the norm, really, for you as a child. She had a vacuum cleaner as well, it was a Goblin which [clock chiming] was a cylinder machine and it looked a bit like a torpedo, it made a frightful noise and our dog hated it and he always used to start barking whenever it started up [laughs], those were the only two things I remember.

[11:38]
She – we used to have a car, it was a little black Standard I think, but … I don’t quite know when – my – my parents had a very complicated partnership, they – they married and at some stage they divorced and I think that was certainly … after my brother was born, but I don’t know whether it was before or after my sister was born. And then they … they remarried and then they separated again, so I’m – I’m – I’ve never – my mother always got so upset about the subject that we never found out quite when all this happened.

[12:33]

But my parents were living in London before the Second World War in Ealing, funny enough in the road that went across the bottom of the road that Mike’s parents lived in, so that’s quite a coincidence really [laughs]. But when the war started my father sent my mother and brother and sister to a … a rented house in Kenilworth I think in Warwickshire, or Malvern or somewhere round there and eventually bought the house in Amblecote.

Did he stay in London?

Yes. Yes, he had a – an engineering business and he was what was referred to as a consultant engineer and he was on a reserved occupation, he helped with wind tunnel experimentation. He was a very bright man but somewhat enigmatic [laughs].

[13:47]

Had your parents divorced for the second time before –

They didn’t – they didn’t divorce again, they separated.

Had they separated for the – separated by the time that you were born or –

Well that’s what I’m not clear about. I have two half brothers and one is older and one is younger [laughs] so that’s why I’m not quite sure of the situation. And that
family grew up in London so I never had any contact with them until they went to my father’s funeral.

So did you ever share a house with your father, you –

Not that I really am aware of.

Yes.

I remember him coming home a couple of times, and once he had had some car accident on the way and he was – I mean he wasn’t badly hurt, he was just I think annoyed that it had happened and my mother got all agitated and was flying around, but there was always a certain tension I recall associated with his visits so it’s all a bit of a blur really, you know, it’s – when you’re small you may get the impression that you don’t share a house with your father because if you’ve gone to bed when he comes home from work and he’s gone away before you get up in the morning and you’d only see him at weekends, but I don’t really ever remember seeing him at weekends. Just the odd – odd visit.

[15:16]

On those odd visits do you have a memory of what he looked like or dressed like or –

He was a very tall gangly sort of person with a sort of shock of straight up hair, you know, he had it cut very short so it sort of stood straight up [both laugh], it was rather strange and I think he was grey at that time. He was six foot two, my mother was five foot two so they were a – rather a strange looking couple anyway, she was dumpy and he was skinny, although I did get to know him a bit more when I was at university and by then he was extremely large as well as being tall. But I just remember – he – he didn’t … shall we say he didn’t take to me and I didn’t take to him so I – even though I was very small I objected to being told what to do by this stranger [laughs] that had come into the house and so I could be very obstinate and … he didn’t – didn’t like that. He liked my sister, she was very bubbly and always pleased to see him and I was very taciturn and so I preferred to hide when he was around [laughs].
**Do you remember the sorts of things that he’d say to you?**

No. No, I can’t recall any of that.

[16:48]

**What do you know about his – his life from, I suppose, getting to know him again at university or things that your mother told you about him, what do you know about his life?**

I don’t know a great deal about it from my mother, ‘cause as I say she got very upset talking about him, and most of it I learnt from my father’s younger sister after my mother died and she would come and visit occasionally when we lived in Cambridge and I’d go and visit her. He was a very bright person, he’d had pneumonia when he was quite small and was expected to die so he was obviously a tough character that he – he got through that. I don’t think he had any formal training as an engineer but he – that’s what he ended up doing and he was running his own business by the end of the war I think and my brother eventually went and – and joined him in the business because he – he sent my brother to be an apprentice with Marconi as an electrical engineer. Unfortunately my brother was – well he went away to school, boarding school when he was 13 and my father put him into an apprenticeship when he was 16 so he didn’t have the opportunity to go to university, which I think was a great shame, he did what father said he should do. In fact I’m very glad that father was not around because he didn’t believe that women should be educated, they were secretaries and that’s all that they were sort of there to be, they certainly shouldn’t have gone to university.

**How did you know that that was his view?**

That’s what my mother said. Because he had – he had wanted all of his children to join him in his business and so we would have been on – Pam and I would have been on the secretarial side and the boys would all have been doing the – the engineering side. But Pam became a teacher and I became a geologist [laughs].
When – when – can you remember at what age you were when you realised that your father had this view of female roles and male roles?

Early teens I think.

And what was your feeling about that view then?

I just thought it was crazy [laughs]. But I suppose because I had grown up [coughs] in a more or less a matriarch household to think that a – a man should sort of dictate what women were going to do was not – just not right in – in my mind.

Although he seemed to exercise some control over things in spite of not being there, you talk about him putting your brother into school and putting him into an apprenticeship and that sort of thing.

Yes, because he paid the fees for my brother’s schooling. And … I suppose he paid subsistence for Pam and I as well until we came of age. Because they weren’t divorced, you know, just separated so my mother had no money, he had to support the family in some way and we – we stayed in – in the house, as I say, until I was nine and –

[20:42]

And then he sold it and he didn’t buy us anywhere else to go so we went and lived with my grandfather, in a funny little shack [laughs].

This was your – your maternal grandfather?

Yes.

Whereabouts was this?
This was in Berkshire. So we – he wanted to sell the house in the – I think it was the summer of ’51 and I was very upset, the thought of leaving home and I said, ‘But I want to have my birthday in my own home,’ [laughs] so my mother said this to my father and that – that seemed to get through, she probably used it as an excuse to hang onto the house for a bit longer, but we – we moved out on December the seventh and there was still a bit of school term to – to complete so we went into a – a room that my sister, mother, the dog and me had a little room just round the corner from where we lived and we stayed in that for the remaining two or three weeks before the Christmas term came to an end and then we went down to the – the furniture had all – and all our possessions had gone into store and we went to live with my grandfather in a little family holiday … chalet type of building that he had built himself … just for a few months but in fact it was … the summer of ’54 before we moved into a house.

[22:39]

And the house that you moved to after the chalet in ’54?

Was bought by my mother’s younger brother and we lived with him and my grandfather … so my father never did anything. We – the little chalet was – was great fun for Pam and I but must have been a nightmare for my mother, because we had no electricity, no running water, no mains drainage, no gas, it had three rooms, so my grandfather slept on a bed in the – the little living room, and there was room for two chairs and a small winged chair and a little pot belly stove, and it was lit by oil lamp hanging from the ceiling. The bedroom had a big brass double bed and a single bed, so my mother and sister slept in the double bed and I was in the single bed. The kitchen was quite small and it had a couple of paraffin stoves with the Dutch oven on top and a big – a 14 gallon container for the water with a tap at the bottom and we would go round to the back and pump the water up and carry it in and fill up this tank. And then the privy was a chemical toilet in a little shack round the side of the house. And it was all emptied into a big pit just behind [laughs], so the water was contaminated. It was part of an estate that people lived on escaping from London I think during the war and it had become – originally it was a holiday estate and people built their own houses, and then after the war people bought double-decker buses and single-decker buses and railway carriages and brought those onto a site, plot of land.
and made them into homes so it was a – an amazing place, and there were a couple of shops on this estate. And we were on the only tarmac road which led up to the local church and there was a – a field opposite, again I was lucky, a field with a railway beyond and there were two lovely shire horses that were used on the – the local farm, so we used to go and sit on the – this metal fence and the horses would come across and be given sugar lumps and whatever [laughs], so again it was – it was a nice open space and it was very close to the – the River Thames, it was at Mapledurham, so we spent an awful lot of time messing around on the river `cause my uncle had a – a small … a dinghy but it was ex-army dinghy of some sort, flat bottomed thing which he extended make – giving it a – a more pointed prow than it had with storage in and we used to go camping up the river on holiday on that, even when we were living near Stourbridge we used to go down and have our holidays in this – this chalet. So in some respects that was nice because we knew the place that we – we moved to with my grandfather, and my grandfather had come to live with us as well in – in Stourbridge when my mother started work, because if any of us were ill, you know, there needed to be somebody at – at home to look after us.

[26:39]

When did your mother start work?

When I was – ’47 when that – as soon as I went to school, when I was five.

What did she do?

She was a teacher, but she was an untrained teacher but because it was a private school she was able to get a job, because even in those days I think you needed some sort of training, she’d been a bookkeeper before, so it was a complete change of career for her. But because it was a private school, you just became a full mistress and at one stage I was in her class, which was very awkward, ‘cause I was one of the youngest ones, I’d been moved up into her class and I remember she’d asked a question, I have no idea what it was and I stuck my hand up and said, ‘Mummy, Mummy, I know,’ and I got a lecture when we got home, ‘You do not call me Mummy in class, I am Mrs Brown,’ [both laugh] so after that, you know, it became a
sort of dual personality in a way, she was Mrs Brown at – at school and mummy at home …

[28:00]

*What do you know of the lives of your maternal grandparents?*

My maternal grandmother died before I was born, so I think she was quite a frail lady, quite small, but she’d had – my mother had an older brother and I think there were twins who died at birth and then she had a younger brother, and they were all teachers. My grandfather was a – a HMI, Majesty’s Inspector at some – I think he retired from – from that but I don’t know what he was before. Hmm, he obviously was a very practical man since he’d bought – built the – the house at Purley and he’d also … built a couple of other houses. ‘Cause they came from Kent, both parents came – my parents came from Kent and, hmm, I don’t know where my grandfather was born, or my grandmother actually, but they were certainly, you know, they had moved around in Kent and had – had several properties. They – they are buried in Meopham Church in – in Kent. And that’s where my mother is buried too.

*What – what did your mum – or perhaps your grandparents tell you about your mother’s life as a child?*

I don’t recall any discussion about that. [pause] No I can’t – can’t think of anything.

[29:58]

*And can you tell me about your – your father’s parents?*

My paternal grandfather had died before I was born. My paternal grandmother was still alive, she lived until she was 90 and she was what you would expect a grandmother to look like in that she had white hair in a bun, rosy cheeks and she wore black, she was quite petite. I think she came from Devon, ‘cause she had a slight burr to her voice, but because my parents were separated we never really saw my grandmother. She approved of the – the other person that my father lived with and we
were more or less cut out of her – her life. But my aunt, my father’s younger sister, was always a favourite of ours, she was a very jolly sort of person and she did come and visit us occasionally in Stourbridge and I don’t think she did come when we were in Purley but we – I remember the Queen’s Coronation we – ‘cause we didn’t have electricity obviously couldn’t have a television in this little chalet [laughs] so my aunt invited us, my sister mother and I to go up to Ealing to see the Coronation on their television, so I remember meet – my grandmother then and I don’t know that I saw her again until I was at university, so it’d be about ten years later.

And this is the aunt from whom you’ve learnt about –

Hmmm.

Information about your father?

Hmmm, hmmm.

[32:08]

Could you then – as being the only grandparent who I think you had significant contact with as a child then, could you tell me about time spent with your – your maternal grandfather, the sorts of things that you would do together?

Well he was just always there in the house, I mean he – when we were still in Stourbridge, Amblecote, he would do the cooking so that my mother didn’t have to worry about that when she came home, and being a private school, Wednesdays was always half day and he would always have a stew ready for us for lunch and he did a very good steamed pudding with syrup as well [laughs]. And he liked pottering in the garden, so he – he maintained the garden for my mother. I don’t know that we went out very much … because it was just after the war and we were fairly straightened circumstances really. He had remarried after his wife had died and then, again I don’t really understand the – the situation but he was asked to leave so he – that’s why he ended up living in this little chalet in – in Purley and then he moved there ahead of us once the house was sold in – in Amblecote and then he – he stayed in – in Purley and
– and moved up to the – the house that my uncle bought eventually, so we just were part of a family unit, but for holidays my uncle went on holiday with granddad and then my mother sister and I went on holiday, sometimes with my brother as well. So, you know, it was just family activities, but pottering around at home rather than having any specific outings. But I used to potter around gardening with my grandfather ‘cause I liked being outside always, and climbing trees and things like that. Hmmm, but he was – he was very deaf … by the time I was early teens and I suppose because my voice was shriller than the rest of the family I was the only one that he could really hear [both laugh] and he never had a deaf aid so, you know, [laughs] people would be shouting at the top of their voices. And in 1957 my uncle decided that we should have a television, because granddad spent his time reading or falling asleep with a cigarette in the corner of his mouth and the ash getting longer and longer and [laughs] dropping onto the book and then onto the carpet, so he could sit and watch even if he couldn’t hear, but it did mean that you had the – the volume up higher than anybody else really wanted, and I would sit at a coffee table doing my homework with this thing blaring on in the corner so I got used to ignoring it [laughs]. So I think my image of – of granddad is with his flat cap on, a cigarette sticking out of his mouth, and he had a beard so there was a sort of nicotine stained bit round it, and pottering in the garden, you know, leaning on a – a fork or something.

[36:01]

Could you describe further the – the sights and sounds and possibly smells of the place at the end of the cul-de-sac, you mentioned a place where you could cut through into an area where you could see the coal – coal working?

Well you – no, you couldn’t see that, it was the coal wagons going across on the – the railway up on the – the horizon, but it was all sort of … I think it was – the houses had been built on the site of an old tip so there was quite a prominent cliff at the end of the – two houses from where we lived and there was a – a path that clung to the – the side of the last house, so to speak, and it was all rough and – but overgrown with weeds and – and gorse and things like that. Probably lots of birds and butterflies, but I don’t think I was particularly aware of those at the time. And it was just a fairly chaotic piece of rough ground that dropped away steeply to this little stream in the – in the
valley bottom and there was a bridge that you could go across and eventually got to the recreation ground in – in Amblecote, but that was quite a – seemed quite a long way away for a small child. There were an awful lot of glassworks around in that area too … there was some of the famous names, there was Brierley Crystal at Brierley Hill and Thomas Webb just down the – the road from where we were, but I don’t actually remember any sounds of those blast – not blast furnaces but the furnaces that they – they had for melting the glass, and I don’t remember anything about the collieries, apart from just seeing these stacks of coal going by in the wagons in the distance, probably half a mile away, across the fields. And I don’t – and in those – those days one always had coal delivered on a cart which was dumped at the top of the drive and then you had to barrow it all the way down to the coal shed, and they would be large lumps of coal [laughs], wish we could get those these days, they’re always sort of piffly little bits that we get now.


Were you involved in transferring the coal?

Yes, oh I think the whole family would get involved in that. Throwing things up into the barrow for wheeling down to the – the coal shed.

[38:56]

Apart from sort of exploring these semi wild places around your house, do you remember what else – before school you sort of played with or were interested in, occupied yourself, apart from, you know, joining in with family jobs and that sort of –

Hmmm … well my sister and I both had dolls [pause] and we had doll’s houses, mine was one that my mother had made out of old orange boxes and she made all the furniture for it as well, so she was a very practical lady, following on from her family background I think. And my sister’s was a bit superior because it was one my father had bought some years before. Hmmm, and we had games like Monopoly and card games, I was pretty good at … at snap which was, you know, you have a – if you see somebody else’s card is the same as your own, as they put it down you say, ‘Snap,’ then you get it and I don’t know whether it was because I could just see as they were putting it down [laughs] but I used to be fairly good at that whereas my sister [laughs]
– I don’t think she was paying attention, so we – we played card games but … I don’t remember a great deal of that, that period up until the age of nine really. We had – sorry I –

[End of Track 1]
Could you tell me about the sorts of things that you did, the time you spent with your mother before the age of nine, so before you moved from the first house to the chalet, the sorts of activities that you did in the company of your mother?

Well there was shopping in Stourbridge … ‘cause I don’t remember groceries being delivered at that house, so we would have taken the bus into Stourbridge and there was a [clears throat] – there was Mason’s Grocers at one end of the high street in Stourbridge and it had big pats of butter and they cut slabs off and then use butter pats to shape them into the – a cube and wrap them in greaseproof paper, wax paper, and bags of sugar were – it was all loose stuff, you know, it was all packed as you ordered it and it was quite a big store ‘cause I know there were two entrances and you sort of went in one, went to one counter and then you had to go across to another counter and get something else, bacon and eggs and things on one side and tinned goods on another.  And I don’t remember – oh I think there was a – yes there was a – a meat market one day a week and we often had rabbit which I was – I liked, I didn’t really like meat, my mother and sister did like meat, I – I like lean meat but I didn’t like gristle and – and fat and unfortunately after the war that’s mostly [both laugh] what you got, so I was always pleased when we had fish from the market and I did eat rabbit, and I guess those were fairly cheap meals at the time.  And my mother would go walking with the dog, you know, so that was a – a – sort of an activity that we both took part in.  And then one of the things that she thought her young daughters should participate in was dancing classes, my sister was very keen on this and there was a – a lady not very far from where we lived, she had a big old house with a little sort of gymnasium out the back and young girls went there to learn acrobatics and tap dancing and ballet dancing and my sister had already been going I think for a couple of years and she really enjoyed it and my mother thought that I should also go and I wasn’t too keen on this.  I was a bit – bit cautious as a child trying new things and I went and watched the girls doing handstands and walking on their hands and all this sort of thing and I didn’t think that that was what I really wanted to do but I was not allowed to be a wallflower for more than a couple of times and I – I did do it and I – eventually I became quite good at it, for the acrobatics, but I certainly did not enjoy the ballet because we – it was silly really, we had to [clears throat] – we had to go up
on the points, which for young children was putting an awful lot of weight on and we had these special ballet shoes with blocks at the front and then you had lambs’ wool to protect your toes inside, and we pranced around on – on these points which I – I tended to make a mess of so that I wasn’t made to do it too much. But I did quite like tap dancing, you can get the rhythm going on that. But that in the end was a bit – it was – I could tolerate these things but what I did not like was the Christmas performances or the – the summer carnivals when the school was – members were – you went on a float, you know, and you were parading around in the streets and I don’t like being the focus of attention, and there was one Christmas concert that I remember where my sister was part of a trio of girls doing the can-can and for some reason I was a small white rabbit and there was a cat, one of my friends was a cat and another was a mouse, and I think I probably was only about five, but my mother had this lovely white satin outfit, she was very good needlewoman and it had floppy ears and, you know, a little sort of covering of the head, a little bonnet with these ears attached and I was asked to sit on the stage and I was given a carrot to nibble ‘cause I enjoyed raw carrots, just to sort of keep me in a good mood, but I turned my back on the audience to eat this carrot [both laugh] and there was lots of tittering going on because [laughs] I wouldn’t do anything else while I nibbled this huge carrot throughout the performance. But I have a photograph of – of me and this cat and the mouse posing with our toe – bare feet, you know, doing a little routine and my – there’s a – I’ve got a picture of my sister also in her little can-can outfit. So I didn’t enjoy that, I … have never liked performing on stage and I’ve always tried to get out of it. So that was one thing, I think my mother was very good in that she made all these costumes for us and pushed us into doing something that we – well certainly I didn’t enjoy but it was so that I think Pam could get something done that she liked doing and if I hadn’t gone then it would have been more difficult for my mother to take her, ‘cause Pam was old enough to ride a bicycle and I had to be on the back of my mother’s bike.

[06:59]

Although thinking about that time, actually there was one lady who was quite special, she was the daily help who came in for my mother to assist with the housework, ‘cause when my mother was first married I think they were quite wealthy and she had
a – a live-in maid, I don’t know where they were living at the time but she was used to having assistance in the house and so when we were small she did have this lady who came in, and she was from the Black Country, her husband worked in one of the glass factories. Her name was Lily and his was Harry and they were a lovely couple and quite often, when my mother needed to take Pam or my brother Peter somewhere, then I was left with Lily and Harry and they lived two or three miles away in a lovely old typical Black Country row of terraced cottages with a pig sty out the back and a brick – a black brick covered yard and it was a two up two down sort of house with a scullery out the back and a stairs in a cupboard from the kitchen, and rag rugs on the – the stone floor – the brick floors. And they were just a delightful couple, and very caring, they didn’t have any children of their own so they regarded me as a sort of adopted daughter and I think it was quite a – a help for my mother in – during a very difficult time for her that she had somebody who she could leave me with when taking Pam to school, I suppose, and before I went to school. So she was a good backstop for mum and I renewed acquaintance – well I used to write to her, even when we left there and she was not very good at writing letters, she wasn’t very educated [clears throat] but she wrote as she spoke so you knew who you were sort of reading [laughs], and when I went back to Birmingham much later when I started work with BAS I used to go and visit her on the bus, so renewed acquaintances that way, and she came to my wedding so that was nice.

Do you – I know this was when you were much younger, but do you remember the sorts of things you would do with this couple when you –

No.

No?

Not at all, they were just very warm and I’d go and look at the pigs and – and they’d feed me but I don’t really remember very much about it. It was just when I walked into the house when I was in my 20s, you know, it just felt right, you know, it was homely, as I had remembered it …
What else did I do with my mother? I mean we went on these camping holidays from Purley, when sweets were still being rationed and I guess food was still being rationed, she would start putting stuff aside in the early part of the year so that we’d have a reasonable amount of food to take with us on the boat when we went camping. And … I mean she really was a very stoical sort of person, she didn’t mind putting up with a lot of difficulties, ‘cause when we were camping it was – it was rowing and my brother came with us the first time and he had a tent which we put on the bank, and my sister and mother and I slept on this little 14 foot boat and we had a – a hoop – hoop – set of hoops that we put up and a canvas awning over that, so we slept inside the boat. And then she would cook either – if it was wet, you know, she’d cook on the – the boat under the awning – with the awning up or if it was fine she’d cook on the – the bank. But it wasn’t much of a holiday for her really [laughs]. But it was – it was just keeping us all together I suppose, it was a – a good family activity, keeping us together. And the fact that we were made to only have part of our sweet ration earlier in the year, so that we could have more sweets when we were on holiday [laughs]. I remember that there was one occasion when we had camped on an island in the Thames, upstream from Mapledurham, and somebody dropped a – we were passing things out of the boat to shore and they dropped the packet of margarine which slipped into the – the water never to be seen again, so that always became known as margarine island after that [laughs].

Did you read with your mother?

Yes I did. Well she read to us to begin with but I – I was a quick reader, I learnt to read very early, my sister is slightly dyslexic I think, she found it very difficult to read aloud, even when she was a teenager, but I used to follow my mother around when she was doing the housework reading aloud to her. I certainly remember doing that when we were living in Purley in this little chalet, so that would have been after nine, but still at primary school, I can’t remember whether I did it before we moved, but I always enjoyed reading books. Another thing that my mother passed onto me was knitting and crochet, she taught me how to knit at a very early age and I knitted a – a jumper in my school colours for the first private school which was grey red and white, and it was white stripes with red spots on, quite complicated really for a kid [laughs]
and I mean I couldn’t read the pattern but I would knit a bit and then I’d say, ‘Mum, what do I do now?’ and she’d always manage to sort of tell me what was the next bit to do and I used to wear this garment so it finished off [laughs] all right, had little puff sleeves, short sleeves. So she passed on those skills at a very early age. And dressmaking, we had to do needlework at school, a bit of embroidery and sort of linen work. And … she would sometimes take us on a picnic, which involved cycle rides for my sister and brother and I would be sitting on the back of this little – in this little square thing on the back of my mother’s bike, so again that was – was creating effort for her [laughs] and she would presumably have had the picnic basket on the front. And one of the beauty spots not too far from where we lived was Kinver Edge where there was some sandstone – well some houses made out – built – hewn out of the rock, sandstone rock and they were a favourite place for people to go and visit and picnic in the area, it was a very attractive place to go. And they wouldn’t happen very often these picnics but they were always a – a treat, you know, because they were so rare, you know, something different to do. And I think my mother like me always enjoyed eating out whenever possible, and that was something that I remembered from later years when we were living in – with my uncle that whenever possible mum would have lunch or tea outside, and that’s what I do now, you know, it’s one of those things I enjoy doing, it makes the meal more special I think when you can just sit and listen to the birds and watch them flitting around. [Clears throat].

[16:07]

What sorts of things did your mum read to you, before you began to read to her?

[Pause]. I really can’t remember. There were some children’s books that a friend of the family had given to both my sister and me, they were about – they were – I think they were American, *Br’er Rabbit* and a coyote and things like that, so they were animal characters. And we didn’t have Beatrix Potter, we had – my brother had A A Milne books which she read to us from. And I had *Little Grey Rabbit* books which had pictures in, hmmm, but they were sort of many – mostly children’s things, you know, there weren’t any classics or anything like that [laughs]. And I’m not sure that there that many books available at that time, you know, growing up during the war and just after the war, it was probably quite difficult to get hold of printed books.
What did your mother read then for herself?

She had a lot of the novels, Dornford Yates and P G Woodhouse and things like that I seem to remember being on the bookcase. [Pause]. It was – I think she had had quite a bit of books but when the house was sold a lot of the furniture and the belongings went to my father, so there wasn’t a great deal left that I can recall from when we regained possession of the sort of family things a few years later. So yes, I don’t really remember a great deal about what was in the house at – at Stourbridge.

[18:26]

You’ve – you’ve mentioned the – the holidays involving the boat and the picnics to, one place you mentioned was Kinver Edge, and I was wondering whether you could comment on the landscapes that you think were significant to you as a child and that you particularly liked or spent a lot of time in or made an impression on you, so I mean we’ve got this sort of – the field at the bottom of the garden, you could describe the – the sort of river landscapes that you travelled through on holiday and Kinver Edge and any other sort of natural landscapes that you sort of held in high regard as a child?

Well I think rivers have always been important because of those early camping times on the – the River Thames, I sort of associate them with swans around the boat and the early morning mist rising from the river, and the meadows with the cattle coming down. And there’s a place called Goring Gap upstream from Mapledurham, well above Pangbourne and that has the chalk hills on either side and wooded and I always enjoy woods as well, so woods have always been quite important to me, woods and rivers. We did have seaside holidays, the only time that we spent in a hotel I remember it was on the Isle of Wight … I don’t remember a great deal about the Isle of Wight [laughs] but I remember the journey going there because we – we caught the train from the – the junction on the – this railway that I’ve mentioned that was behind us that was mostly for coal wagons, it did have a few passenger services which took us to Stourbridge and then we changed onto a Birmingham train and went to Snowhill Station and then we caught the train down to Portsmouth and I think it was the – the
train that went to Portsmouth that was so full and it was mostly service personnel and that we had to stand in the corridor ‘cause the train was so packed. It was a bit of a – a crush and we were sitting on our suitcases and our little dog was with us and he wasn’t too impressed at having his paws trodden on [laughs] by people trying to get by, so I remember that journey, but I don’t really remember very much about the – the hotel. And that must have been quite a – a luxury for my mother, because after that we were always either on the boat or my uncle had a caravan and he would tow it to some place on the south coast or the Isle of Wight and we would go down there and have a – a week or a fortnight in the summer, so I enjoyed the sea, although I didn’t learn to swim until I was about 12. And that was a – a bit more comfortable for my mother to cook in the caravan rather than cramped up in a – a boat. But I think we had to get there by train because she didn’t have a car. So I’m not sure that the sea was particularly important in my life, it was really woods and hills and river that sort of … is what I remember, you know, the memories.

Why do you think woods hills and rivers, rather than any other kind of form?

I love trees, I like being inside a – a group of trees … possibly they have a … a softening effect on the landscape.

[22:48]

I remember [laughs] the first time I went to the Antarctic and I was with a colleague who had been the first person I met when I joined BAS but he’d gone to Columbus and we thought it quite funny that we should end up on the same ship. And he said, ‘Well what do you think about being in the Antarctic Janet after all this time?’ I said, ‘Well it’s beautiful, but it could do with a few trees,’ [laughs] and he said, ‘What?’ he was scandalised, but it was just so … [sighs] bleak isn’t really the – the right word, what should I say, stark I think, very beautiful but not something that I had been used to before, so I – I thought a few trees would have softened it up nicely [laughs].

Make it a bit more picturesque.

Yes [laughs].
Some foliage in the foreground.

Yes.

[23:52]

Your – your sister and you, could you tell me about the sense you had as a child of your difference – your difference from your sister, or your similarities to your sister, in other words, how you thought of yourself in relation to her as a child?

… well she was always bigger than me [laughs], so I mean we used to have scraps and she always won ‘cause she was bigger. And we argued as siblings always do. And she used to tease me dreadfully and I was a – quite a quiet child and obstinate and if I didn’t get my own way I would sulk for quite a long time and then she would sort of aggravate the whole situation by [taunting voice], ‘Janet’s in a temper, Janet’s in a temper,’ [laughs]. But on the whole we – we did get on quite well actually and we’re still friends all these years later. I tended to sort of observe what she was doing and if she had friends round I would be in the background. [clock chiming] I wouldn’t – I observed rather than participating in what they were doing because, you know, they were older and didn’t want a – a kid around. One of the things that we did do together was play shops because a friend of my mothers had made a little shop for us and we had this in the garage which was by then empty of the car that my mother had sold and the person had made lots of tiny little packets that we could exchange, and my grandfather smoked cigarettes, a lot, so we had umpteen packets of empty cigarettes to – to sell, so you could actually spend quite a long time taking it in turns to be the shop assistant and the – the customer, so that was good fun. We had a swing in the garden and we would take turns on that, but she was quite a tomboy, whereas I was not so courageous, I think probably, in attempting anything new, I’d wait and see what she did first [laughs] and then follow. [Pause]. But she was definitely – well physically we look very different and she talked all the time and I tended to be the quiet one, so when she eventually left home it was quite a – a chasm really [both laugh], you know, the house was a lot quieter. And she liked music and dancing and doing things whereas I would sit and read quite happily all day.
When you’re thinking of that time of you sitting and reading all day, what age are you then and what are you reading?

I would say I was probably early teens, and it was mostly non-fiction, I still prefer non-fiction to fiction.

What sorts of – do you remember things that you read at that age, titles, authors?

There was Hans Hass and his adventures, *Kon-Tiki Expedition* … my uncle was a keen sailor and he had quite a lot of books about people sailing around the world, so I read those as sort of an introduction to what lay beyond the UK. [Pause]. I did have a few children’s books … when I was about ten or eleven probably they were sort of junior detective books and things, fiction like that which I quite enjoy, and I still read detective stories as a – a release when I’m on long plane journeys. I can’t really remember a great deal else of what I was reading. But it would be sort of outdoor things, wildlife, and I had been given a book of flowers of Britain when I was probably eight and I’ve still got that book and I can – I know where to look for the different plates because, you know, when it’s a sort of new thing to you, you have a photographic memory you can remember where to look exactly for things. And I did enjoy collecting flowers and pressing them and identifying them.

Where did you collect them from?

Fields around, both in Amblecote and – and Purley, and the riverside at Purley as well, and the meadows by the river.

How did you collect them? I mean once you’d pressed them, presumably in a flower press.

Hmmm, well under books [laughs], in a newspaper under books. And one of the projects at the – the second primary school I went to was making a collection of wild
flowers and putting them into a book, identifying them, and so there was a bit of …
marks for presentation I guess, so that you had to not just slap them down and write
any old how, you had to organise it a bit.

[30:44]

So I enjoyed doing that. And I’ve just remembered another activity that I did with mum and that was collecting blackberries in the – the autumn, that was a – always a
great fun time, you know, going out and nibbling them as you’ve collected them,
getting all torn to shreds [laughs] and then she would make blackberry and apple pie
when we got home.

*Could you describe the – the journey and the – and the – the scene of collecting the
black – the blackberries?*

By then I would be cycling and we would just go down little country lanes … and I
guess she would have had a basket ‘cause poly bags weren’t around in those days.
We would have put them on leaves to protect them so that they didn’t get – stain the
basket underneath. But it would be hedgerows, you know, beside the roads and there
wouldn’t be the amount of traffic in those days to make them inedible so that they
would – they would be quite easily accessible from – from the road, you wouldn’t
have to tramp down farm tracks or something like that to get away from the roads, so
it was very different in those days when hardly anybody had a car, it would just be
farm wagons going by or the odd motorbike. So it was – it was a pleasant activity.

[32:23]

*Do you remember anything of the teaching of nature study or of geography or science
at your first – the private primary school?*

[Pause]. No. I remember learning to write, where we had copy books where you had
the letters written along the top line of the – the book and you had to replicate those
underneath several times and then it became words that you had to replicate. I
remember we were – we had French, we were taught French, we had a French
mademoiselle came across and I enjoyed that because I had a good memory and I could remember the vocabulary. I remember mathematics and general knowledge but I don’t really remember … anything about geography or history at the first school. And we did have radio broadcasts, the whole school would assemble in the hall and there would be the school service and sometimes there were films of – I remember one about Dr Barnardos home, I don’t quite know why [laughs], maybe it was about, you know, the plight of children who were poor after the war, and so we would have these programmes and then there would be a comprehension test afterwards, if – if it was a – if it was a film then there would have been a general knowledge test afterwards and if it was a story being read then it would be a comprehension thing at the end. So we got a bit of history that way I guess. And I don’t actually remember formal history and geography, or science or anything like that at that first school.

*Any scientific content in these broadcasts?*

I don’t remember those. No.

[34:37]

*Could we then talk about the – the next school, when did you move there and –*

Right, well there was a bit of a gap, because we moved in December ’51 to live with my grandfather in Purley in this little shack, it was supposed to be temporary and my father was going to find a house for us near where my brother was being an apprentice at Marconi’s in the St Albans area, but he never did and I remember my mother informing me when I was ten that father wasn’t going to come back and live with us at all and I was being – I was highly delighted [laughs], we were walking down the – the road from the church at the end of the – the lane, the avenue where we lived and it was my mother and sister and my mother turned to my sister and said, ‘Should we tell Janet what we’ve learnt today?’ and Pam said, ‘Yes,’ and they did so I did a little skip in the – the road and said, ‘Oh jolly good,’ or something like that [laughs]. Of course my mother was very upset but I was – I was relieved because I just hadn’t any feelings for him, he was just a – a stranger who I didn’t really enjoy the company of. So … that – that was either ’51 or ’52, I can’t really remember – sorry no, it’d be ’52
or ’53, but because my mother was expecting us to move around she didn’t do anything about getting us into school once we’d moved to Purley and it was the end of the … Easter – Easter term I think that … she decided that Pam really ought to go to a local school … and she was thirteen I think at that time, she’d just passed the – she failed the eleven plus but she’d passed the thirteen plus and had moved to a different school before we left Stourbridge area, so she was put into the – the grammar school and the nearest one was Wallingford which was about eleven miles from where we lived, and my mother still didn’t do anything with me, so I had two terms without any schooling. Pam had tried to teach me a little bit in the first term when she was at home but then the second term when I was by myself with – with granddad I decided I would have a school for my dolls and I set up a series of exercise books and register – register for them and sort of played the schools that way but I didn’t have any formal work to do. And my mother got a job temporarily as a teacher at a private school and … then she was offered a position at another private school which took girls and she said, well could I go to that school and so I got a – part of the deal, the headmistress was very kind and gave me free access, so I had free private education [laughs] because my mother taught at the school. So I went there … it will be the autumn term of ’52 when I was still not ten, ten in the following few months. So I had two years there and I was in the top form and took my eleven plus there and then passed that and went to Wallingford Grammar School afterwards.

[39:12]

What do you remember of the teaching of science geography or possibly nature study, I know you’ve mentioned the flowers –

Yes, we –

Nature study at the private school, age nine onwards?

We did have history and geography, it was a much better run school than the first one, it was far more organised, with a form mistress so she dealt with everything, she was a lovely lady, she … she was from London, she had a slightly cockney accent a real guffaw of laughter, and she was – she was very encouraging … she always made
positive comments, you know, even if you’d made a hash of things [laughs], you know, she didn’t slap your wrist, she just said, ‘Well try better,’ and she was a good friend of my mothers too. So I – there was that – that introduction to wild flowers under her and I know that there was some history and geography but I can’t really remember a great deal about it, just an awareness of what was around. I seem to remember that there were exercise books where you had a – alternative leaves were lined pages and drawing paper on the other and we sort of drew pictures on things and maps and things like that. And that continued in the first years of the grammar school I think as well.

*Did you do any learning out of the classroom?*

No, I don’t recollect any of that … no, it was all – all in – all in the class. It was in a – the school was in a place called Tilehurst which was a little village then and we lived still in this little chalet on the flats of the – the Thames valley floor and we had to climb up quite a way up the – the chalk hill to the main Reading Oxford road and then we cut across and along a long lane which was actually called Long Lane for a couple of miles which went up and down hill and then we got up to Tilehurst which was up on the highs, so my mother and I cycled that route every day, probably two and a half miles or something like that. My mother eventually got a little motor on the back of her bike so she had this pop, pop, pop thing going along whilst I sped along on my bike [laughs], ‘cause it was quite a lot of effort for her to cycle up all these hills.

*Would you – would you at that age have described it as a chalk hill?*

No, I wouldn’t have known.

[42:31]

*Could we then – could you describe the next school, which is Wallingford –*

The Wallingford –

Wallingford?
Grammar School. Yes … now that was an old established school, coeducational, Wallingford was then in Berkshire still, it had a – it’s now in Oxfordshire. It had a town charter from 1155 … and the – the grammar school I think was from 16 – no 17th Century I think, the main building. So it was a long – long established school, had a big playing field attached to it, and I had four years there, we – because it was eleven miles away, of course there was a lot of school bussing went on and to begin with we went all the way round the houses on both sides of the River Thames, so it took about an hour to – to get to school, and I think the – the intake on that side of Wallingford had increased and so eventually they got two coaches, one on our side of the river and one on the other side so that we didn’t have to leave quite so early in the morning but it was – I suppose it was ten to eight was when we had to go and catch the bus at the end of the lane, and Pam and I would walk down together and there would be about probably three or four others who got on the bus, ‘cause we were right at the end of the – the run and then we picked up in Pangbourne and all places between and to Wallingford. The school was organised with two streams in each year and because they didn’t want to … distinguish between – you know, make people feel inferior and have an A and a B, you know, it was P and Z, and I think actually there were three streams in the first year, I’m not sure about that. But at the end of the first year then you were reallocated into P or Z and Z was the bright ones and P was the not so bright. The … girls were expected to do needlework for the first two years, but you also did general science and the boys did woodwork I think or metalwork. [Pause]. And if you were in the Z stream you did Latin, if you were in the P stream you didn’t, I can’t remember what they did do. I think it was biology – biology, which seems a crazy distinction. So I did Latin and French and I really enjoyed languages, I enjoyed the science, I did not like maths and I did not like history and I enjoyed geography. But because I had a good memory I could also remember all the dates in history so I was actually good at history as well as geography [laughs]. At the end of the second year you had to decide whether you were going to do science or domestic science, if you were a girl, and I definitely wanted to do science, so that was okay, you know, they didn’t quibble about that, so instead of doing a general science you started to do physics and chemistry as separate subjects. But at the end of the third year you had to decide – well no it was decided for you, boys did geography, girls did history, and I said, ‘I don’t like history, I don’t want to do history,’ and I
think my mother must have written to say that, you know, I really wanted to pursue geography and not history so because I’d got equally good marks in both subjects I was allowed to – to do geography. And it must have been a new thing that they had brought in ‘cause my sister had done geography and she was several years ahead of me but it may be that the – the classes were large and they wanted to do a – a direct split, so there were very few girls who did geography in my year. So it was a – rather sort of haphazard way of scheduling one’s education that, you know, if you were bright you did Latin because that was still required for entrance exam to Oxford or Cambridge, I think that was the reasoning but I – I didn’t really want to be shunted into the – the history side of things. But I did enjoy languages so, you know, I was still a split between arts and science in that respect. But I didn’t like maths, and I think that was partly a perverse reaction ‘cause that was the one thing that my sister was good at and they all expected me to be just as good as my sister [laughs] and I wasn’t going to be so I’m – I could do it but I did get a bit stuck on thinking things through. And I’m very good at mental arithmetic but I still don’t particularly enjoy doing maths, if I see equations in a – a science paper my eyes tend to glaze over and I quickly go onto the text.

*Why do you think that you preferred – or can you remember what you – you felt in terms of preferring geography to history at that age?*

It was more alive. You know, history – I think part of the problem with history was that we had been going over Anglo-Saxon and Viking history and early man at primary school and then when I went to grammar school we started doing it all over again and I got bored, and I don’t think I got anywhere past Charles I or something in history so it was all dead, past activities, couldn’t relate to it in any way, whereas geography you were in amongst it all the time, you know, living it, it was a living landscape. So I think that was, you know, partly it. Teachers do also have some bearing on this. And the history teacher … was – she took us for Latin in the early years and, you know, I enjoyed Latin but I just didn’t get anything out of the – the history lessons from her.

[50:21]
Whereas the – the geography master was a very different sort of thing, he had a ginger tweed suit, a rosy complexion and white hair and sort of circular glasses and a beaming face, you know, he was – he was known as Uncle Tim [laughs] and he – he really was a – a jovial sort of chap and he knew his subject, he got it across very well.

*Could you describe the teaching of geography by him?*

… It was working with atlases and – and him talking about different countries, I don’t actually remember anything about physical geography with – with him. But I only had him for … a year after we, you know, we made this division between – well I must have had him before because he – he knew – he was one of the ones involved in the – the decision that I could do geography rather than history, but I really don’t remember a great deal about that, at the beginning of grammar school period, it’s funny really.

*Was there any fieldwork?*

No.

*Do you remember how you were viewed by the majority of boys taking geography as someone who had through a kind of exception resulting from this letter from your mother, been part of the course?*

No, there was always rivalry between the boys and the girls in the class as to, you know, who was going to come out top. There were three of us and there were two boys and two girls and we sort of aimed to be the top in the class all the time [laughs] and it sort of varied from term to term who came out top.

*Across the subjects or in geography?*

Across the subjects. I can’t really remember, I know that I did sometimes come top on geography but I don’t think it was all the time.

*And was geography throughout grammar school book based, atlas based?*
Yes, yes.

*Rather than physical geography?*

Yes. We had – at the – the last school that I went to, we had the opportunity to take part in some fieldwork which was – now what was his name, was it Dudley Stamp did a – a land use survey.

*Yes it was, yeah.*

And I was allocated a – a selection of fields to go and check which cereal crop was coming up in the – the spring and how they were progressing during the summer, and because of cereal’s growing around on the – the Berkshire Downs you had to be able to identify easily what was oats and what was rye and what was wheat and what was barley and so there were little diagrams that showed how the – the leaves curled round at the stalk as they emerged, and my mother borrowed – I think she borrowed my uncle’s car and drove me around to these sites at weekends, to – to do that survey, so that was the only mapping that I’d done during my school career.

*You say this was at another school?*

This was after Wallingford. Because at the end of the fourth year, Berkshire County Council decided that it was not going to have any coeducational schools anymore and it set up single sex schools and a new school was built for the girls at Didcot, which was five miles from Wallingford so it was even further for me to go to school. My sister didn’t go there because she left school at the time that the split happened, at the end of my fourth year, so in the fifth year when you were doing O levels we had to get used to a whole set of new [clock chiming] staff, some of the – the mistresses went across to the new school but there were a lot and since I had been taught mostly by men I did have to get used to new staff, so I’d had physics master, physics – chemistry master, maths master, geography master, Latin master … English master, art master [laughs], must have had, in that last year there must have been – I know it was a – a maths mistress, that’s right, the maths master was our form master but there
was a maths mistress and – and she – she taught me and she came with us I think, and there was a PE mistress came, but on the whole most of my subjects it was new people that I had to get used to in – in the O level year.

[55:55]

*Before we go onto A levels and I’ll ask more about the land use survey, could you describe the teaching of physics and chemistry at Wallingford Grammar School while you were still in the co-ed?*

Hmmm.

*Or perhaps let’s do one at a time, could you tell me about physics?*

Physics? He was a rather lugubrious character … very quiet, tall man … he was very efficient at the way he – he taught but I wasn’t particularly enthused by the subject I must admit, but … I didn’t – because there was a certain amount of maths in it I sometimes got a bit held up [laughs], hung up I should say, by the – all the theory … and we had a big lab in a – an upper floor … where we did all the – the usual experiments and sound and light and whatever.

*What were they, can you remember those?*

No I can’t [laughs] … didn’t really make a great deal of impression on me I don’t think ,because he was so – such a quiet person I think the way he taught it was almost subliminal because [laughs], you know, it sort of went in and stuck there eventually, but there was no theatrics about it, the way he presented it.

*Do you remember the, you know, any examples of images or ideas or reactions, I don’t know, or structures that stuck from that time … or instruments, pieces of equipment?*

… no, I can just visualise the lab, I can’t really remember a great deal about it.
When you visualise the lab what are you seeing?

Well it was just this tall building with wooden beams exposed so it was – it must – it was a big room, an upper floor room and it probably a – an old dining hall or something in the original school building, and it had back windows but I sat with my back to the window so I was looking at – I think there were glass cases on the wall, lining – lining the wall opposite the windows and there would be benches and we were sitting on stools at benches and he was on a – a raised dias at the – the far end opposite the – the entrance door, with the blackboard behind him, and I can’t remember very much more than that.

What was the sort of male and female split on that subject?

[Pause]. Well I think it was – it was probably twenty-five percent girls and seventy-five percent boys … because I … I was just going to say I thought that possibly when the girls did domestic science they combined with the – the other class in the year but I don’t think that did happen, because I don’t – I don’t think we combined with the – the science classes, I really can’t remember how it was structured actually.

And chemistry, the teaching of chemistry?

Chemistry was quite different, he was – he had been an industrial chemist, so he hadn’t been a teacher all his life, and he was a rather ill looking man, he was sort of ashen faced and wore glasses and he was tall and thin, and he kept pretty good control of everybody but he – he liked … doing experiments and making you jump and so there was no worry about him having – naked Bunsen burner flames going and all these stinks that you associate with – with [laughs] chemistry lab, it was in an isolated building in the schoolyard [laughs] so it was separate from the main building. And – and he was known as Uncle Sid and one of his favourite words were, ‘If you can’t keep quiet I’ll get you to cool off in the yard,’ so, you know, anybody who was misbehaving was sent outside of they couldn’t be a bit more responsiveness to what he was trying to get them to do. And he – any dangerous experiments he demonstrated on his desk at one side of the lab whilst we sat and went, ‘Cool!’ you know [both laugh]. But then, you know, there were usual things of heating up
different things in test tubes and watching them change colour and bubbling up things in flasks. So it was quite an exciting – exciting thing. But … I lost him of course when we moved to the new school.

[1:01:53]

What was this tendency to refer to the teachers as Uncle – Uncle and their name?

I don’t know, most of the – the staff had nicknames … there was Millie and Molly and Dolly [laughs] for the – the ladies, they were the older ones, you know, people who had been around and thought of affectionately, so anybody who was regarded as a good teacher, you know, had a – a nickname like that, but if you didn’t rise to a nickname then you were a bit, you know, iffy [laughs]. So I think it was just that it was a – an affectionate terminology really that had been passed down from generation – to generation of pupils.

[1:02:52]

How did you feel about moving from a mixed school to a – the girls’ school?

I didn’t like it.

What – what didn’t you like about that?

Well I thought it was unnatural to separate the sexes, I also had enjoyed the rivalry between the boys and the girls in – in classes. Possibly because I hadn’t grown up with a – a brother at home I enjoyed the contact with boys. Er … and I think also it was the fact that I was losing the masters, you know, having to get used to female teachers who I – and for some reason I didn’t have the same faith in them that I had in – in the men.

And you don’t know why that – you say – but for some reason?

No, no, I don’t.
And do you remember any particular male friends, rivals from the mixed school?

Well there were two boys that were the top of the class and I aimed to upset that from time to time [laughs], so there were two boys that I – I recollect and they were John Farmer and Adrian Heesle, two names. I know Adrian went into I think read chemistry at London, I don’t know about John. I haven’t kept in touch with any of them.

And the school at Didcot which was the – the single sex school and what – what stage had you got to in terms of choosing options or studying for certain exams at that stage?

Well those had been chosen in the fourth year at – at Wallingford, so whatever you were doing at that stage you then went on to – to take at O level at the end of the first year at Didcot.

So could you please tell me about the teaching of O level geography?

That was … different. Because we did a bit of economic geography I think at that stage and a bit of physical geography, I remember those two things. Still it was quite a big class because it was the combination [something dropping] oops [laughs], it was the combination of the two streams into one at the new school, so it became – because, you know, we were only half a class from the two streams and as the first year of the intake for the – the new school in the fifth form, you know, we just were combined into one. So … there were – I seem to remember that there were quite a few people in the geography class there, so I don’t know whether there were girls from – I think there were some girls from other schools that – that came in, but not that many, but it was mostly the – the girls that were from the other class and it’s strange really that although we did physical education together as a – a year, you never really got to know the people in the other class, in your – your – your year, unless they were on the school coach, you know, if they lived nearby you got to know them a bit more but otherwise you were kept rather separate, you didn’t intermingle very much, even during lunch hours, you were probably in your forms rather than in
your years that you – you sat around in, so strange really that you don’t get – and you go through a whole four years and you don’t really know these people [laughs]. But maybe if you were living in a – a town and you weren’t so far separated from them you would interact with them socially out of school hours perhaps more.

*Leaving aside the land use survey for a moment, what was – what did the teaching of geography in the field involve at Didcot?*

Well there was no – that was the only fieldwork … it was – all of the lessons, they were all class based, I don’t think that there was any practical work out of the school buildings at – at that stage, one didn’t go away on field courses or anything like that in – in those years ‘cause we’re talking about mid to late ‘50s.

*And what did the teaching of geography, physical geography in the class then, entail?*

It was going through exercise books, looking at photographs of … different landforms and there was a bit of – I was going to say there was a bit of physical geology there but there wasn’t, that was in the sixth form. I think it was just the landforms that we really concentrated on in the fifth form and then as I say, the economic geography which was then amplified in the sixth form.

*Do you remember any particular landforms that were, you know, you were exposed to in that fifth form, geography teaching?*

No. I just remembered that at Wallingford the PE master took us for geography [laughs] in the first year and we did learn about ordinance survey maps and the symbols on the survey maps then, so that was a – an early introduction to maps.

*And did you learn by using them in the class, or by taking them out and –*

No, just in the class.

[1:09:30]
And what was then the origin of the – of Stamp involving your class, or you in particular in the – his land use survey?

I guess that he must have gone round all the schools in the UK trying to get good coverage of all of the areas, and whether the geography mistress had been one of his students originally I do not know, but she was involved and asked us if we would like to participate and I really don’t know whether anybody else did in my year at school, because again it would be an area nearest to where I lived which was fifteen, sixteen miles from the school, so whether somebody else was doing something nearer to Didcot I don’t know.

And what were you given by – I mean through the land use survey to record on or –

It would have been a six inch survey map, ordnance survey map.

And they gave you that to do this?

Hmmm.

And how did you record the crop types on the map?

… I really can’t remember whether I had a symbol to use or whether I just wrote the word, you know, barley or rye or whatever it was, or woodland.

And do you remember in any more detail the notes that you say you had allowing you to identify –

No.

Correct –

No.
And when your mother drove you around, how would you observe these fields, by getting out, by –

Oh yes, yes, you had to go out and sort of get down on your hands and knees and look at the stalks to see, you know, how the – the leaves were developing around them. And checking the field boundaries too to make sure that they were the same as are on, as appeared on the map, I don’t recall any differences, but that was one of the things that one I think had to look at.

And what was your mum’s view of this as a weekend activity?

I think she just enjoyed it because she sat and read [laughs] probably in the car whilst I – whilst I was doing it, we may well have had a picnic with us, because my sister would have been away from home by then at teacher training college.

[1:11:56]

Do you remember anything in particular of the teaching of physics and chemistry at – in – at Didcot in the – in the girls’ school?

Yes, the lady who did the chemistry was … she was a very pleasant lady but I – after Uncle Sid she just didn’t sort of come up to snuff in comparison and I mean she was perfectly competent, but because I didn’t feel as confident with her I decided not to do chemistry at A level and I was more confident in the – the ability of the physics mistress so I did physics A level and unfortunately she left to have a – a baby during the first year of A levels, so I then had to get used to another [laughs] younger person teaching physics, so that was a bit disappointing, can’t really remember very much about the subject matter ‘cause in a way it was going over old ground but in more detail as one got to an advanced level.

And so your A levels that you chose were what?

Maths, physics and geography. Because by then I had decided to wanted to do science, so if I’d done the subjects I really want – I was – I liked it would have been
geography French and Latin, which wouldn’t have got you anywhere [laughs] with a career and so I was thinking about the science side of things and that for a degree maths and physics would be better to go with geography.

And could you tell me about this decision to pursue science in the future, I mean what made you decide that that was something that you wanted to do as opposed to anything else?

Well originally I had thought about doing a classics degree when I was still at Wallingford because I really enjoyed Latin, but we didn’t do Greek so that was a bit difficult, and I know my mother went to one of these parents’ evenings and she spoke to the – the Latin master and he said, ‘Well if she’s interested in doing Latin there are two careers ahead of her, law or teaching,’ and he thought I was too shy to be a lawyer so he said, ‘Teaching,’ and when she – my mother [laughs] said that to me I said, ‘I am not going to be a teacher,’ I come from a family of teachers and my sister was a teacher so – or training to be a teacher, I certainly was not going to do that, so that really sort of set me thinking about alternatives. And I think most people in the family were arts based so I wanted to be different. And I think the physical side of geography was really what interested me rather than political or economical geography, and we used a physical geology book in A levels, so thought, oh well, geology, sounds like a challenge [laughs], so that sort of directed me that way.

Why did you have this desire to be different from other family members and notably –

General perverseness I think [laughs]. I just didn’t want to conform; I mean I wasn’t outwardly perverse, I just liked to go my own way.

What would you have disliked about, you know, following your sister, doing the same things as your sister? What sort of feelings would it have resulted in?

I don’t think there was any rivalry in that respect, but I just didn’t want to do the same thing as she did, I just wanted to be different.

Do you remember the geological textbook that you were using at –
I think it was Holmes, Arthur Holmes book on physical geology, ‘cause we had it again at university. But in those days geology was not taught in schools, I guess it was because my geography mistress had probably done subsidiary geology at university when she was doing her training that she had brought this out as a textbook used to describe landforms and the underlying rocks that … gave life to the landforms on the surface.

*Do you remember what appealed to you about geology at this stage?*

Partly that it was outdoor, an outdoor activity, I mean that was really why I wanted to pursue geology as a career, because it would be outdoors. I wanted to be outdoors. If I had ever done biology at school I probably would have gone for botany, but because I did Latin I never did any biology, you know, that was the dichotomy of [laughs] the school scheduling that one didn’t have that, and that would have … would have taken me into botany I suspect, if I had had the background.

*Hmm.*

But I didn’t so I went to geology as an outdoor exercise.

*Was it taught as an outdoor subject at A level?*

No.

*Any physical geography fieldwork?*

No.

*How did you get the impression then that this was an outside subject?*

It seemed logical to me that if you were studying rocks you had to be outside [laughs], but I suppose I must have read about it a bit, I can’t really remember. I know that it
was the outside that attracted me, I wanted to do something that would allow me to be outside.

Were you pursuing – I know that there was no organised fieldwork by these schools at all, apart from the land – the land use survey that you were doing slightly separate from the school, it was a sort of optional project –

Hmmm.

Were you … at this time were you looking at landscape in a different – starting to look at landscape in a sort of, hmmm, organised way when you were on holidays or playing out or … moving about as a teenager in the world? Were you starting to explore landscape in a particular way?

[Pause]. I don’t know, when we went to places on the south coast, like Lulworth Cove and Swanage, where there’s, you know, very good coastal outcrops, then I would look at those. I don’t really remember whether I was astute enough to really sort of think about it, why they were there, I was just intrigued but I don’t know that I followed it through particularly. I did get books out of Reading public library on … on geology, on volcanoes and catastrophes, earthquakes and spectacular things like that. I was intrigued by those. I don’t really recall much more than that. I mean you sort of accept these things and gradually move on, I don’t know that there was any earth shattering moment [laughs] when, gosh I must do geology because this is wonderful, I just sort of drifted into it really as I didn’t to be – do geography because that would have meant I probably would have been channelled into being a teacher again … and maths and physics were only there under sufferance really, because I didn’t particularly enjoy them.

Where did this impression come from that geography would lead to teaching whereas geology would lead to science?

Probably from teachers at the time, you know, if you had any career talks then that would have probably come out because they wouldn’t have thought any – in fact that was still actually when, many years later at BAS that there were very few geographers
on the – the staff, because it wasn’t science, you know, it was sort of airy-fairy stuff really [laughs]. So I think that was a general perception actually, quite widely held out of academic spheres, you know, general population thought of – thought a bit like that, you know, what did you do with geography?

_Now it was at this time that within geology that the idea of continental drift was being discussed, do you remember that be – coming up in A level?_

No, that was really only just coming out as I took my finals in ’64, that’s when the Canadian, Wilson, sort of started publishing papers, so it was barely touched on even during my university degree course. So I certainly don’t remember anything about that at school.

[End of Track 2]
Now in terms of the sort of chronology of the recording we’ve got up to, the sort of end of what we’ll call sort of high school period, A levels and – and so this is now a – you’re at an age where you will be aware of the sorts of things that I’m going to ask about and the first is the kind of political engagement of your – your mother, so – or lack of it, to what extent was your mother in – involved in formal politics or in … what kind of – what kinds of newspapers did she read that marked her out as having a particular interest, that sort of thing, her political interest and engagement.

Well she always voted, she wasn’t a great newspaper reader, in fact I’m trying to think what – because we lived with my uncle he took the News Chronicle when it existed, I’ve forgotten what he went to afterwards … when that died [pause], and he was a – a church warden, so he was very much involved in parish activities and my mother was a member of the Mothers’ Union but apart from that I don’t know that she actually participated in anything out of the home apart from her teaching.

[01:43]

Could you tell me about the Mothers' Union, I don't know what that is?

It’s a church based thing, unlike the WI, I think it was a way of getting the ladies of the parish together with the – the vicar’s wife, rector’s wife and I think they had monthly meetings and arranged teas and raised funds for – for local things. I don’t know that she was terribly involved but she – when she could spare the time she went along to meetings. But I think she was pretty exhausted really ’cause, you know, she had teaching and she taught needlework so there was a lot of preparation to be done at home before she went to school and I know she hated writing the reports at the end of every term [laughs] because the – the headmistress was very exacting in what could be put on a report and what couldn’t. And she did the – the flower garden and my grandfather did the vegetable garden, so the – and the housework, you know, was more or less hers and the cooking, so she didn’t have a great deal of time really left over to participate in things outside, and I’m not sure that women were expected to – to do anything beyond the home in – in those days, it’s very different now.
Did she have any religious faith herself?

Yeah, she always went to church, so we all trooped off to church in – on a Sunday, certainly for the – the morning service to begin with and then as we got older, teenagers, it tended to be the early morning communion that we went to and then we had the whole of the – the day for doing homework and whatever had to be done. And she continued to be involved in the church when she retired and moved elsewhere.

What was the extent of your faith as a child and a teenager?

I just accepted that you went along with whatever mum and uncle did and didn’t really think about it, one just did it, and I was confirmed and … I think when I went up to university I did think about going to church in Marylebone but it was such a huge church and I was used to a small local parish [laughs] church and I just felt lost in it, and from London I moved to Birmingham and it was the same thing again so I rather lost touch and – with that – in that respect and began to think about it and, you know, sort of didn’t particularly want to pursue that, despite pressures from the older generation [laughs], you know, I decided not to get involved.

Hmmmm. And more generally, what was expected of you as a child and as a teenager in terms of your conduct, what would your mother say to you about right and wrong things to do?

Hmmmm, she didn’t like a display of emotion so that one didn’t show anger in public, I mean amongst the family yes, tolerate it to a certain extent [laughs], but one didn’t display that sort of thing if there were visitors. One didn’t cry in public, one didn’t
cry so that if you fell over and hurt yourself, even as a child, you know, the first thing was, ‘Do not cry,’ and there’s no point in sort of wasting your energy on bawling your head off, you just concentrate on stopping the pain. Very strict in that respect, but I think that was because she was a single parent so she had to be soft and hard at the same time, whilst she was treating the wound, she was also trying to tell you to keep a stiff upper lip … I think one followed example really without having too much said about it, what was right and what was wrong. I think it was – it probably was, that you … perhaps if you had stepped out of line you would have been told that that was not what we did, but I don’t really particularly remember any occasion when I was told, ‘That is not what we do,’ I’m sure there were occasions when it happened [laughs] but I don’t recall them, they weren’t sort of traumatic occasions that they’ve stuck in the memory [clock chiming].

[07:03]

Were there significant relationships at high school and – and A levels, that sort of time? I know that you moved into a – a girls’ school at some point in secondary education, but boyfriends, that sort of thing?

No, I wasn’t interested in that to my mother’s disappointment, ‘cause my sister was the opposite, she had quite a few boyfriends and there was one boy at the grammar school in another class who wanted to go out with me and I was furious because he asked my sister to ask my mother whether I could go out with him, didn’t consult me whether I wanted to go out [laughs] with him and my mother said, ‘Oh yes, you will,’ [laughs] and then it was a very unhappy occasion [laughs] ‘cause –

So you did, you went –

I had to go, yes. And he lived in Didcot before, you know, the girls’ school was there so I had bad vibes about Didcot from then on [laughs].

Why did your – you said that you were obstinate and why did you not refuse, why could you not refuse?
I knew how far I could go. There was a subsequent occasion when I was head girl at Didcot Girls Grammar School and there was a dance arranged with an Abingdon boys’ school and I didn’t want to go and my mother said, ‘You have to because you’re head girl,’ and the headmistress said I had to go ‘cause I was head girl and I didn’t wear make-up or anything like that and I had put on a dress to – to go and my uncle was taking me ‘cause it was about twenty miles to get there, and she said, ‘I bought this lipstick for you,’ I said, ‘I’m not going to wear that,’ and she said, ‘Oh yes you are,’ and we sort of had a – a dust up and she pushed me onto the settee and put this lipstick on me and it was horrible, it was bright red [laughs], it was completely inappropriate for a young teenager and of course I washed it off once I was in the – well rubbed it off when I was in the car but didn’t put me in a good mood to go to a dance, that was the only one I went to [laughs].

Who put – who put the lipstick on?

My mother.

Hmmm. What – can you describe the dance itself or – or –

No, I was probably in such a foul mood [laughs] I’ve erased it from my memory.

Hmmm. And the – the date with the – the boy from the grammar school?

That was a Valentine’s dance and I – I must have – I don’t know whether I was in the third year or fourth year at – at the Wallingford Grammar School, but that was a one-off, not to be repeated.

Thank you.

[10:02]

Now we’ve got to the – the point that you’re applying for university, so could you tell me about the process of applying, deciding where to go, arrangements for transferring yourself from living at home to going to university in London I think?
Yes, I actually wanted to go to Cambridge because I’d always supported Cambridge Boat Race team [laughs], and I preferred the light blue to the dark blue and also, another of these silly connotations that you have with places, Oxford was where I had to go for the new school uniform for Didcot so again it was associating a bad vibe with the place because of – of Didcot. I mean I was happy at Didcot school, it was just that I objected to the being uprooted I suppose at a vital stage in my school career. The headmistress was a mathematics teacher, she was a – I think she was from Yorkshire, she was a very kindly lady but quite strict and we were – because of the amalgamation – or the – no, the dismembering of the school, it was a very small sixth form class, there were ten of us I think in the lower sixth and only four of us saw it through to the upper sixth, so she asked us, you know, what we wanted to do in the way of career and by then I had decided that I did want to go geology, apply for a geology course and I wanted to go to Cambridge and she said, ‘Well you’ve got no chance of getting into Cambridge,’ but I did write and they said I hadn’t done the right A levels to do a – a Natural Sciences Tripos, I’d need to do an extra year and I didn’t want to stay on a third year at school and, you know, it would have been difficult for my mother I think anyway. So I then sort of – I suppose I sifted through places that would do geology, there weren’t that many geology courses available at the time, Reading was one of them and since we lived four miles out of Reading, that would of course meant that I would have been at home, which I didn’t fancy, would have been difficult to study [laughs] with the television going full blast in the corner of the room [both laugh] with granddad. And also part of the experience of going to university is being away from home I think. So I thought about London and I don’t know why but the headmistress suggested Bedford College because it was a women’s college and it was one of the few that had an entrance examination and my best friend at school who lived in the same village as me, she decided that she would quite like to go to London too so we sat the entrance exam together and she was going to do – she was good at mathematics, she was going to do maths and physics I think, and I was going to do geology and physics. So we took the entrance exams, because I hadn’t studied geology yet I was given a geography paper and I did a physics paper and my friend did maths and physics, and the headmistress didn’t have very high hopes of either of us passing. My friend unfortunately was not invited for interview but I was and I went up to Bedford, Bedford College, and they – because I’d done a geography
paper, they sent me for interview in geography department and I sat in the corridor outside whoever was giving the interview [laughs] and I got ushered in and they suddenly said, ‘Oh, you’ve applied to read geology, why are you here?’ [laughs] and so there was a great deal of shuffling around and they found a lecturer free in geology to interview me so I was shuffled off down there, and I was the only applicant that they’d had that year to read geology honours. And I remember the guy saying, ‘Well what do you want to do at the end of your course?’ and I said, ‘Well I was wanting to do physical work outside,’ and he said, ‘Well females don’t do field activities, you’ll be either a – a micro-palaeontologist in a lab somewhere or doing geochemical analysis in a lab,’ and I just thought he was talking hogwash and I sort of said, ‘Well I want to do geology,’ you know [laughs], so I was accepted and I just had to get two A level passes to – having passed the exam I had to – that’s all I needed, which wasn’t a very good incentive to do particularly well at A level, so I didn’t do particularly well at A level [laughs], I got my three A levels but they weren’t particularly high marks. So I was accepted to do geology and with physics subsidiary. So I went back and my headmistress was quite amazed that I’d got in, but she was pleased obviously. So as far as I was concerned that was, you know, the next – the next move and all I had to do was see it through to getting the A levels in the summer, and just disappointed that my friend hadn’t made it.

[16:23]

_Can you tell me about your friend and what – the sorts of things you did together, before you presumably – before you went to London?_

Not a lot really, I mean we were just friends at school, we didn’t – we didn’t do anything very much outside, not that I can really ‘cause she was quite a – a bookish person too so we used to read books on the coach to – to school and we just sort of liked each other’s company. At the end of A levels I went to spend a month with a French pen friend in the French Alps, near Grenoble and my sister and mother were going on a jaunt to Paris to take me to Paris where I would catch the train down to Grenoble and they invited Barbara to – to go with them because we’d hoped that she could have come with me all the way but the family that I was staying with couldn’t accommodate another person, so she got a – a trip to Paris with Pam and – and mum
but I didn’t get the benefit of her company, but we still see each other, in fact we had lunch together a couple of weeks ago in – in the Dales, so we’re keeping in contact.

_Did she go on to work in science?_

She took a holiday job at ICI until she decided what she was going to do and she met her former [future] husband there who was one of the staff and a brilliant mathematician, so they got engaged fairly soon afterwards [laughs] and that was the end of her thinking of going to university, but she worked at ICI in – with computers I think for quite a while and then she had a family and then she went on the administrative side at Reading University.

_How novel were you two as … female students studying A levels and wanting to study science at university at that time, when you were both going for this Bedford job –_

I think we were unusual, well I mean there were only two other girls and they weren’t interested in following a higher degree, I mean a higher course – level of education.

_Only other – two – only two other girls in the sixth form?_

Yeah, upper sixth.

_So in the upper sixth there were just four girls of the whole girls’ school?_

Hmmm.

_Everyone else stopped?_

Hmmm. And I think that was partly because of, you know, the split of the two schools ‘cause I mean the boys’ school I think had far more people staying on into the sixth form. I think a lot of people, a lot of girls found it disruptive changing to a different school when they were taking O levels, so from what would it have been, thirty odd in the fifth form when we amalgamated to just ten in the lower sixth, so that’s quite a lot of debris falling away [laughs] at the end of the fifth form.
And do you think – was there a link between what you’ve told me of the headmistresses low expectations, for example of you two applying and the lack of girls staying onto the sixth form, in terms of the expectations?

No, I don’t think so, I think she was just … there was a girl in the year ahead of us who’d got to Oxford who was new to our – our school anyway, you know, she hadn’t been at Wallingford, I don’t know where she came from, and she was going to read philosophy politics and economics and was very much a very articulate person, whereas there was nobody in our group who was particularly articulate, I mean Barbara was even quieter than me I think [laughs] and the other two were just, you know, in a way it was a surprise that they had stayed on to get A levels because they didn’t seem particularly ambitious people.

[20:50]

Hmmm. Do you remember what you read on the bus with your friend, just on the way to school?

I … I think I was definitely doing non-fiction where Barbara went for Hardy and DH Lawrence and all that sort of thing and I never actually have got round to reading any of those [laughs].

Do you remember what non-fiction you were reading at the time?

No, I can’t. No.

[21:16]

Now the interview for geology at Bedford College, when the lecturer said, ‘Well, you know, females in geology don’t work in the field,’ and you said that you thought that this was hogwash.

Hmmm.
But from what you’ve said about you as a person at the time and you’ve just said again that you were quite quiet, I can’t imagine that you said to him that’s hogwash.

I probably said something like, ‘Oh really?’ [laughs] and – and didn’t comment further because, you know, if that was his opinion, I probably wouldn’t change it and I wasn’t going to change my opinion either.

So did you remember what you felt at that time about – ?

Surprised I think. Because as I say I’d grown up with my mother sort of being the single member of the – the generation above me, sort of telling me what to do and – and she also told her younger brother what to do, so it was more or less a matriarch environment and, you know, the few run-ins I’d had with my father I had taken exception to him telling me what to do and I didn’t really expect other people, other men to say what women could do. I think it was sort of early realisation that there was this sort of gender situation but I still didn’t accept it as it shouldn’t be a bar to what I wanted to do.

Do you know the – do you remember the name of the lecturer?

Yes, Charles Holland. He became Professor of Geology at Dublin University.

Do you remember what else he asked you in the interview?

… No, I know he was – I think he asked me if I’d ever done any geology and I said, ‘No,’ but he – he looked at the results of my geography paper and apparently I had done very well with that. I remember it was something about rivers and river capture and sort of conferences of rivers, and I didn’t think that I had … I didn’t recall having done anything like that in the course at – at school, so I just made it up on sort of commonsense grounds and obviously I said the right [laughs] things. But I guess it showed that I could think without just regurgitating stock stuff.
And do you remember the appearance of the – the corridor and the room in the department – you were presumably –

Geography – oh what –

Well yes we can start with geography but then I know that you were then in – they found someone from geology.

Yes.

But yeah, so – so the corridor where you were waiting in the first place for the geographer to –

Yes, it was a very dark and – and dingy corridor on the first floor, sort of accessed via a rather dark pair of stairs I think, dark stairway. And there was this single chair outside a door as far as I can recall and I was ushered in, I can’t remember the person that I spoke to in geography at all because I was pretty quickly hustled back to the – the porter’s lodge whilst they found somebody in – in geology, and the geology building was another wing, a separate wing from the geography and it – it seemed smaller and cosier and on the – on the ground floor it had more light ‘cause there was a window at the end of the corridor, so it was a much smaller department and therefore generally more homelike, and it was a small room that I was ushered into, his – his own office with – where he interviewed me. And because they weren’t expecting anybody [laughs] there was no chair waiting outside [laughs] so the porter just took me along and knocked on the door and in I went.

What did he look like?

The porter or the [laughs] –

No sorry [laughs] the –

Charles Holland?
Yes.

[Laughs] He was a very affable man, slightly droopy eyes, dark hair, very softly spoken, very charming, he was a very nice man. And a little bit bemused I think at suddenly finding that he was interviewing a potential student [laughs] but very sympathetic interviewer and … I … I have a feeling that it was he who told me that we had to specialise in the first year to – whether we were going to do palaeontology or petrology, and since I’d never done anything it was … difficult to know, but because I’d never done any biology and I had done physics and chemistry it was obvious that I was going to be petrology specialisation, so it was a bit strange, you know, before you’d even start on your course that they were asking where your interests lay and what your subjects were so that they could get a feel for how the course was going to go for you.

[27:01]

Now it’s worth mentioning at this point in the recording that many people listening to the recording won’t have any geology at all, and so I wonder whether we could start at this point and carry on by explaining what those terms mean, so faced with the choice between palaeontology and petrology, what were you being faced with?

Either studying fossils, fossil animal remains, or studying rocks in – rocks that have been sliced so thin that you can see through them under a microscope and you can study their origin and the type of minerals that made them up, so that’s where chemistry comes into petrology because it helps you to understand the composition of the minerals.

Thank you.

[27:58]

And the department you mentioned was small, could you describe the geology department as a whole?
I think they had six lecturers in there and probably three or four PhD students. There was one person doing … the geology honours in the year above me and I think there had been two honours geology students above that. So it was very small but it was augmented by people from geography doing subsidiary geology, so in the first year there were – I think there were about twenty geography students and me going through all the lectures, in fact I don’t think they did all of them because it was subsidiary, so that there were a few that I did and then there was a – a funny thing in London at the time that you could do a – a combined honours degree so instead of doing one subject for three years and a subsidiary subject for two years you did three subjects – two subjects for three years, but not at quite the same level as, you know, the specialist subject. So there were two girls who were doing combined geology as well. So they attended all of the lectures that I went onto as a – an honours student. And then after about two weeks one of the geography students decided that she wanted to do geology as well as her main subject rather than geography so she switched so there were two honours and two combined honours, women doing the geology course. And I had gone up expecting to read physics subsidiary, having done physics A level, but unfortunately the girl above me, in the year above me, had also been doing physics as a subsidiary and she’d made such a hash of it and the physics classes were oversubscribed, they didn’t want to have another geology subsid student, so our – because I’d opted to do petrology they said would I do chemistry as my subsid, so I said yes. But I hadn’t done chemistry for two years, so – in fact I was doing almost two new subjects when I went to university and it was more difficult really for me to get in – back into chemistry from the practical side than it was learning how to do geology practical, because they assumed that you didn’t know anything in geology and they sort of handfed you so to speak [laughs] whereas chemistry you were expected to – to know what to do and I remember – it was physical chemistry rather than organic chemistry because that dealt with the – the make up of minerals and … and enabled you to do – analyse the minerals so you could do eventually a geochemical analysis if you wanted to. The first physical session that I had in the chemistry lab I walked in and there were all these people with retorts doing some sort of measurement of chemistry and I – I just didn’t know what to do, I had to observe [laughs] and there was a very kindly lady in charge, the lecturer, and I sort of asked a few questions and she sort of [laughs], what have we got here so to speak [laughs]. But she – she helped out and I gradually picked up the –
the way of doing things again, but it was a bit of a – a shock [laughs], you know, sort of new strange environment and not having a friend to say, ‘What do we do here?’ you know, not knowing anybody and not being part of the chemistry department, you know, you – you – when you’re a subsid you’re very much a – another person, you’re not – you don’t belong to that department, you don’t have the same feeling of belonging and it was a very large class that was doing chemistry anyway so that was a bit of a shock. I remember writing home to my mother and saying, ‘Well I’m not going to be a geophysicist, I’m going to be a geochemist,’ [laughs] but it all worked out well in the end and it certainly helped doing the – the chemistry, but there were just two of us in the end doing some of the – the chemical analysis for the physical chemistry side, because the – I don’t know what the other chemists went on to do but it was just my fellow student and I in the lab, making holes in our lab overcoats [laughs] dropping things on it.

And every – all of these chemists would have been female because this is a female college?

Yes.

[33:34]

Could you tell me about the – practically what you did in the laboratory as physical chemists, if it changed year by year then if you could tell me what you did in the first year, what you did in the second, what you did in the third year, otherwise, you know, the kinds of procedures that you did, practically what you did, step by step?

Oh dear. Well we didn’t do anything ‘cause – in the third year because it was only a two year course.

Subsid, hmmm.

And I can only remember this – sort of the initial shock of going into the – the lab with the – the retort stands and pipettes and goodness knows what, I guess we were doing specific gravity of things but I really can’t remember much of what else we did
[laughs], but I do remember in the geochem lab, you know, in the chemical lab when we were sort of heating up Bunsen burners and things and seeing how substances interacted and how you could detect what that substance was from the way it reacted with different acids. But I can’t remember anything else about that, dreadful how once you don’t use these things you forget all about them.

And what sorts of things were you doing that ended up producing holes in lab coats?

Oh I’d probably sort of wiped … beakers with sulphuric acid or something, you know, that I hadn’t measured out properly and it had dropped over and I sort of wiped it on – on the clothing [laughs], not really thinking what it would do.

[35:21]

How did you – how did you feel about working with chemicals and getting holes in coats and clothes and –

Didn’t worry me at all. I suppose ‘cause it stemmed from the days when Uncle Sid had been waving these things around in gay abandon and – well not exactly gay abandon but, you know, he set the limits and we – we knew that we were comfortable with what we were doing, that it was safe, if he said we could do it we – we trusted him and he knew it would be safe, so I think that sort of gave one confidence to do things later, sort of mem – remembering what we – how we had been behaving in a chemistry lab before, presumably he gave us lots of dos and don’ts which just became part of one’s automatic activity when you went into a – a chemical environment.

[36:13]

And was there any self-consciousness of yourself as a female chemist, I realise you were in a university which is exclusively female, but on the other hand were you aware at that time of there being anything sort of culturally novel about you being a female chemist?
No, I don’t think so. The two … lecturers who dealt with the laboratory work were females anyway, I think there was only one male lecturer who dealt with physical chemistry. But no, I – I don’t – didn’t feel that because it was quite a large class and, you know, just all females together, didn’t think about that, whereas in geology there was only one female lecturer, all the others were male.

[37:04]

*Could you tell me about each of the lecturers in geology, you said there were six.*

Hmmm.

*And you will have told me about one of them, the interviewee – the interviewer.*

Yes. Yes. He – he dealt with stratigraphy which is the [clock chiming] – the study of … he dealt with stratigraphy and the – the study of sedimentary layers of rock and also some of the fossils, his speciality was I think graptolites which are tiny little fossils that look more like pencil sketches on slate, they really are very thin and unless you hold the rock in the right light you can’t really see them, they’re not – they don’t have any sort of calcite or anything like that to enhance their – their presence in the way that shells fossilise. So he dealt with that and there were … two young males, one, Brian Sturt who dealt with petrology and world sort of distribution of igneous rocks which are the molten rocks, both larva’s and those that solidify under the ground. And there was Peter Banham who was a young lecturer who I think probably had only started a couple of years before I went, and he was also on the petrology side. There was a young Canadian, Edward Appleyard who was on a – I think a one year sabbatical from Canada, so we learnt a bit about the Canadian Shield and ancient rocks as part of the world distribution of rocks. The professor was Basil King and he had done a lot of work in the Uganda Rift Valley and specialised in alkaline igneous rocks which had very nice minerals, pretty minerals when you looked at them under the microscope. And we had Grace Dunlop who was another of the palaeontology lecturers and she specialised in carboniferous fossils I think and she did a lot of stratigraphy with us as well. So they – she and Charles between them sort of covered the whole range of stratigraphic sedimentary rocks.
And do you remember any – this was the first time that you’d studied geology as a single subject, you’d used a geology textbook in geography at A level but do you remember in the first year any striking images, maps, ideas, methods that particularly interested you that … that you liked?

Well I enjoyed the – the mapping sections because – sessions because we had a – a two hour practical each week with samples of maps and you had to interpret what the features shown on the map meant in the three dimensional aspect, and once I got to grips with those I sort of worked out quite quickly I think how one could interpret a flat sheet of paper and make it into a three dimensional model. So I enjoyed those exercises and I enjoyed the crystallography, which was the – the structure of all the crystals and the different forms that different minerals have. That was quite a demanding subject for the geography subsids, they began to wonder what on earth they were doing in geology [laughs] ’cause they could handle the physical geology side of things from the landforms but when it came to the nitty-gritty of crystals and minerals they weren’t too enthusiastic about it, and they didn’t mind the fossils either ’cause that was something that they could relate to. But I think the – the crystallography was a detail too far as far as they were concerned [laughs]. I enjoyed the – the field excursions and we had – I think there were five day excursions on a Saturday to various places around – not too far from London where we had coach outings and I think there would be one weekend field trip in the second term and then you would have a month’s mapping during the summer vacation which was part of the degree at the end of the three years, you know, what – what you produced and how you described it was a part of a paper, you had a viva on that. What else did I enjoy about the geology? [Pause]. I mean it was all so new really, it was just sort of doing lots of reading about the whole subject and it was a – a massive amount of information to take onboard in the first year, fortunately we didn’t have to do any essays, I shared a room with a historian and she had to write a – an essay every week, poor thing [laughs], but we – we had – but then they didn’t have all the practicals, so because of doing two practical subjects there was no spare time in the – the week at all because there were lab activities every afternoon for both geology and, you know, the next day it would be chemistry, so there were two practical sessions of three hours I think in the afternoons for – for chemistry and then three for geology, so it was a
very full programme, it was really like being at school to a certain extent, it was just an extension of school because you were kept so busy [laughs], you didn’t have a great deal of time to sort of think about things independently. Which I suppose is – is a pity in a way ‘cause if you’d had essays to write you would have had to have sort of synthesised what you’d been reading and write it down in your own words, but that didn’t come until the final year actually.

And what – what during your degree were the sort of key – in terms of reading the literature, what were the sort of key big arguments within geology that – ?

Well there was – I think there was a lot about ring – I seem to remember ring complexes because there were some ring complexes up in – in Scotland that were being described and these are where you have a igneous activity welling up within – in a circular form and then the focus of the upwelling moving along a – a set rift or fault of some sort and the chemistry of the rocks sometimes changing with the evolution of the – the upwelling location and Prof King had done a lot of work on the ring complexes, in Uganda I think it was, so he was very hot on these and I – I think they were younger than the – the ones in – in Scotland, so there was a sort of compare and contrast. And as a whole department – I think it would be in my final year, the department closed down and we all moved off to the Geol Soc, Geological Society in Piccadilly, because all of the staff were members of the Geological Society and as a student you could become an associate member for, you know, a much cheaper rate. And so each week there would be a – a lecture by somebody on a subject and then there’s be lots of questions and answers and a general bun fight, I can’t remember whether that was before or after [laughs] so we would all go down as a group there, so that was quite nice ‘cause it got you into the society way of doing things and you met a lot of the and coming young geology lecturers from around the UK who would go down and present their ideas and get shot down by the local [laughs] geologists of the time. But I can’t really remember what it was all about now … it was mostly – the ones that I was interested in, because of the – the igneous petrology, those were the ones that I attended, that I tended to go to, or pay attention to I should say, I went to most of them but didn’t always understand what was going on.
Were there any big sort of theoretical debates going about, I don’t know, uniformitarianism versus, you know, chaotic events leading to a – you mentioned the sort of continent drift and plate tectonics only being discussed towards the end of the degree.

Hmmm, hmmm.

Where were you hearing those debates, in lectures, at Geological Society?

I guess it would be because I don’t remember it really being touched on, except in the briefest terms by Prof in the last couple of terms that I was at university. So I took my finals in June ’64 and I don’t think many of the publications that were sort of confirming plate tectonics came out until ’64, so it would have been a very hot topic just about the time that we were burying our heads in our notes [laughs] and revising things rather than paying attention to what was going on. And it would not have been included in the final paper because it would have been a bit too controversial I should imagine.

Thank you.

[49:07]

Okay, I’m going to ask you about a number of things that you’ve mentioned and if you could describe those in detail, the first one is the sessions in which you had to convert a 2D representation in – or interpret it in terms of three dimensions, if that was a practical session what did the interpretation involve, model making or – ?

No, you had – you had a flat sheet of paper and a sketch had been made of a – an imaginary set of … geological information on a flat sheet of paper. Say you had a folded rock, a series of folded rocks, and on a flat sheet of paper they would look like a series of in – of horseshoes, one inside another, and there would be little ticks on one side of the lines denoting the – the strata and you would have to work out which way these little ticks were dipping to give you an inclination of the – the rock, and there’s usually a little number set beside the tick saying thirty degrees or fifty degrees,
so – and if it was thirty degrees it would be a gently inclined fold, and if it was sixty then it would be a bit more imposing, and you had to work out whether it was dipping like a basin or whether it was dipping like a hole – a hill. And then you would draw on another sheet of paper how you saw this as a three dimensional model, so you didn’t actually make a model, but you just sketched it in three dimensions showing that it was either a hill or a basin and whether it was horizontal or whether it was also inclining to a – a point somewhere, so it was that sort of thing. It was a bit like a crossword puzzle really, you know, sort of working out the clue – from the clues and coming up with an answer and they were very simple to begin with and of course they got a lot more complicated as the years went by and you had all sorts of faults interrupting the folding and movement along those faults in different directions and you had to work out how it was and you’d have some series of strata that weren’t affected by this folding and faulting and that meant that it was much younger strata, that was post folding and faulting and unconformitism, things like that.

What were you told about the right and wrong ways to draw these things, to sketch?

I guess you were left to your own devices to begin with and then somebody would look at them and either put up on the – the board in the lecture room what was the correct way to do it or tell you individually I should think.

Thank you.

[52:25]

Crystallography, practical sessions, could you tell me what – what was involved, step by step in doing that?

There we had … wooden models of crystals of different shapes, hexagons with pyramids at either end or cubes, interlocking cubes and you were – you had to draw in the axis, there would be three axis that you had to draw into these, so you did a sketch of the model and then put in the A B C sort of axis, and I can’t really remember why [both laugh] we had to do that, I’m sure it had some very fundamental exercise – reason, but I can’t remember. And then the more that you got onto the – the complex
models you learnt which minerals adopted these particular form of crystals, so that linked, you know, the crystallography and the mineralogy began to get a vocabulary really of which minerals took which forms so that when you were given real samples you could say, ‘Ah, well that’s a – a cubic mineral, therefore from its colour it’s probably garnet or something,’ you know, or – or pyratite [ph] or something like that, pyrite [ph] I mean.

What was the process of inspecting the real samples when you were given them?

Well there were lots of little … samples of them, or common minerals, so they were handed out and I think you worked in pairs and sort of described them. Again this is where you – you found out what the – whether it was cubic or hexagonal or whatever and then you looked at its other properties and there were scratch tests so that you could find out how hard it was. So the hardest and the colour … were the indications at that time, you didn’t do any chemistry on it, that wasn’t part of the geology course, yeah.

What about microscopes?

And then – yes, the … later we went onto the thin-section work and that’s where you looked at it in normal light or in cross polarised light and you see the natural colour and if it’s colourless you look at it in – in crossed pole – polarisers and you get all the interference colours that come out and they’re specific for different minerals.

Thank you.

[58:29]

The – you said that there were five day long Saturday excursions throughout the – each year of the course, over the –

I think it was the first year, yes.

Right.
And that was getting people used to working in quarries and walking over fields and identifying different outcrops of rock, what a – a limestone rock looked like and what the chalk was and the dreaded London clay [laughs] and Oxford clay and things like that, so it was a familiarisation really over a fairly short period because you had set off in a coach from Regents Park, where Bedford College was, and then drive out of London to some quarry that the lecturers knew about and wander around and be told what you were looking at and then it – it would be sort of referred to in the lectures in the weeks later, you know, this is what we say and this is what we’re now describing and its context within the UK geology.

*Given that this is something that the – the interviewer told you female – that women would not do for – in other words, geology in the field, was any comment made of that, the gendering of fieldwork on these trips?*

No, and I think the reason that women … weren’t sent out by firms or surveys, national surveys, was the fear of them being out on their own in the field, being vulnerable in the fields, so they didn’t want the responsibility really of having women who they didn’t think could cope by themselves in difficult situations, I think that was basically it. Whereas when you were out on field courses for the – the degree course, then it was, you know, there were plenty of people around so you weren’t working by yourself except on the – the final year mapping course, when you were left to your own devices but again you were in a fairly civilised part of the country, it wasn’t too remote.

*When these coach trips went out, with there being only one female lecturer in geology, were you mainly being led by one of the male lecturers?*

Hmmm, hmmm.

*Were you ever led by the – by Grace?*

Yes, oh yes, yes. She – I mean if it was a – an area where it was her speciality then she would be around. And when we had the fortnight field trips she was usually there
as part of the – the team. Though because there would be, let me think, I think there were – there were four, five … six of us by then because another – in the second year there was a – another person joined to do geology, so there were six of us and there would be Prof and Grace and then they usually had a … well the Prof had a research assistant who was also doing a PhD, so he would come along as well. But sometimes it was Prof and Peter Banham and Barry so that wasn’t – she didn’t come on – on all of them.

*And was there anything masculine in the tone or content or the presentation of this fieldwork?*

How do you mean?

*Well in … in talking about fieldwork, in demonstrating fieldwork, in – in moving through the landscape, in the things that were carried, the kind of conduct in the field, was there anything about that was being self-consciously presented as masculine, as – as for example intrepid in a masculine way or as arduous in a masculine way, is there anything about the – the kind of presentation of the geologist – the academic geologist in the field on these trips that struck you at the time as being masculine?*

No, I don’t think so. I mean we were all expected to keep up with these chaps leaping over the rocks and up the hills, and most of us did manage to keep up, I mean there was always – if the geography subsids were with us you got a much larger group and so they were – you will always find stragglers [laughs] amongst those and they’ll all be – be people who want to keep up with the lecturers because they hear what’s being said as soon as you stop, whereas if you’re a straggler you’re just catching up [laughs] when Prof says, ‘Oh well it’s time to move on again,’ [laughs] and you’ve missed out on all – all his pearls of wisdom. But the Prof was … a smoker and he did struggle a bit on hills anyway so he – he wasn’t striding out ahead of us by too far. But some of the younger men were a bit more mobile. But I don’t – I don’t remember that, I mean one was expected to carry ones own hammer and rucksack and collect samples and take them back to the – the coach so there was no – it was just, you know, that’s what you do and nobody’s going to give you a helping hand, if you don’t like it well that’s tough.
Anything else taken into the field, a hammer –

And hand lens so that you could inspect the rocks at close up. And a pad and pencil so that you could make notes, and pencil because if it rains you can still read what you’ve written, when it dries out, if it was a biro then of course it would have gone through several pages and be lost [laughs].

Maps taken into the field?

Yes, we usually had … one of the British Geological Survey sheets of the area and the Prof would have an unrolled – I mean a flat copy and then we would have perhaps the relevant section cut out for us to have in our notebook or in a – a waterproof container of some sort. And you would all usually have a packed lunch as well in your rucksack [laughs].

Is – is there across the three years one perhaps day field trip or perhaps it was one of the weekend ones or – or a longer trip, one that you can remember in particular as being a – particularly clearly that you could describe as a sort of story about it from start to finish, saying what you did when and that sort of thing, is there one that would be easy to narrate if you like?

Well one of the – one of the first ones was the Easter vacation trip in the first year and so it – that included the geology subsids as well as the honours class, and we went up to Edinburgh because that’s where Grace had done her training and she knew the area and she was Scottish, is Scottish, and we stayed at a hotel … now that was a novel experience for me because since I was five I’d not been in a hotel again [laughs] so this was quite amazing, but it was a Scottish hotel so it wasn’t that comfortable since it was taking twenty odd students, and the food I don’t think was particularly great, but anyway on this day we were heading out in the coach to the Pentland Hills and we were going to look for graptolites, these very hard to spot pencil like inscriptions on – on pieces of slate. And we got out of the coach and we were walking over the – the moor to where there was an outcrop and it began to snow, and it was very wet snow and it was only just starting really as we got to the outcrop, but when you’re trying to
look for a very faint fossil on a piece of slate that’s got snowdrops melting on it [laughs] it’s actually quite difficult and … we were doing our best to sort this one out but in the end it – the snow got so much that we had to stomp to the coach, but the coach had moved in the meantime because he’d driven round to where we were expecting to come off the moor on the other side, so it was actually quite a long walk and the snow was pretty thick and a lot of people were getting quite distressed about it because they were getting cold, but I – I didn’t mind, I had got corduroy trousers on and they were just absorbing the moisture and whilst I kept walking, you know, it was pretty good insulation, I wasn’t getting cold and I remember Grace saying when we got back to the coach, ‘Well I can see you’re going to be a geologist Janet,’ [laughs] ‘cause I wasn’t moaning, I was just sort of enjoying the challenge of – of getting out in the elements. So we didn’t do a great deal of geology that day, I mean we did find a few graptolites that somebody had collected some samples and then we looked at them when they’d dried out [laughs] back in the hotel, but it was a way of sort of showing how the – the weather can inhibit what you’re doing in the way of fieldwork and you have to be prepared to take it all in your stride really, so that was a, you know, I sort of enjoyed it, enjoyed the challenge.

*Was there a difference between geographers and geologists in the way that they approach the – the landscape?*

I think there was, they were – as I said, they were interesting in how the strata impacted on the landforms that they were seeing, but they weren’t really interested in going into the detail of what made up those rocks that underpinned the – the landforms, so they got lost very much in the … the moor sort of hidden sides of [clock chiming] geology. I think they enjoyed the mapping sides too but they didn’t come on any of the detailed mapping courses, that was – they attended these field courses which was really just a way of going around and getting you familiar with the types of strata that you found in different parts of the UK so that when you came across these terms in lectures and in reading papers and books that you knew, it’s like, oh yes, hmmm, oolitic limestone, Cotswolds, that sort of connection.

*Apart from taking notes with a pencil, did you record what you were seeing in other ways?*
I had a Box Brownie camera [laughs] which was getting to be a bit old fashioned, even in – in those days, so that one could take photographs of things that particularly interested you, specially if you could see folds and faults in cliff faces, then that was a good way of recording it. You were expected to write up your notes each night, so after dinner in the hotel you would regroup and the lecturer would go over what you had seen and then you would write it up and make sense of what you had written and in conjunction with what had been said that night. But sometimes, you know, things happened so quickly you didn’t – you only got half the message down in the field [laughs] and so you needed that sort of time to pull everything together in the evening. And then at the end, when you got back home, part of the vacation work of what – what was left of the vacation was to write this up properly and then you had to hand it in at the beginning of term and the – the lecturer would look through and – and mark it and see how well you had actually [laughs] understood what was going on.

*How would you assess – how did you assess then your – your seriousness and interest in the subject compared to your fellow students?*

Well I think I was more committed, definitely from– than the – the geographers who did regard it as a sort of second best subject and the … my fellow student, you know, the one that was also doing the subsidiary chemistry, I mean we were about the same and she was more articulate than me, she could put things down very well and the other two who were doing combined geology with maths, they were both very conscientious workers, so I think we were all actually very committed to doing our best that we could in the subject.

[1:09:51]

*Can you say more about this view of geology from geography, their – their regard for it as a second best subject?*

Well it’s because they hadn’t chosen to read it, you know, it was their – their second subject and I suppose it was the way that I regarded chemistry, it was [clears throat] –
it was something that I had to do to get my degree and it supported the degree, but it
wasn’t what I’d really come up to university to – to study.

_Hmm, thank you._

[1:10:21]

_Could you tell me the sorts of things that you did in London when you weren’t
working?_

I was a member of the Bedford College Rowing Club, having messed around in boats,
you know, during my teenage years, I had always wanted to row in a racing boat and
it was something that only the boys did at Wallingford so, you know, I had been
barred from it there so I thought, oh right, you know, when – the Freshers conference,
that was one that appealed to me and we had a four for Bedford and we didn’t have
that many members actually who rowed as far as I can remember, and so every
Saturday morning when I wasn’t doing fieldwork I would go down to Chiswick and
the university boathouse was there and we’d go out during the morning, row either
upstream or downstream depending on the tide. And I enjoyed that, it was quite a
[laughs] – a challenge in that boat because the keel was slightly warped so the – the
two [laughs] stern members of the – the crew were balanced slightly differently [both
laugh] from the forward two so that was – you had to keep the boat really in trim and
– to get anywhere with that. And there were people from all three years at – at
Bedford were part of the crew. So that was an interesting activity and in the second
year I took part in a scratch eight for the university and they were sort of – test – the –
the coach was there to see what the talent was like and he asked me to come back for
the next Saturday and I said, ‘I’m sorry, I can’t, I’ve got a geology field course,’ so
that was the end of me doing anything on a more permanent basis, but I did
occasionally go out in the scratch eight, but the only trouble with that was because I
was fairly lightweight compared with some of the – the ladies I was put – always put
up in the bow and I preferred to be behind stroke at the – the rear of the boat and so –

_Why is that?_
Hmmm?

Why is that?

Because I only had one person in front of me and nobody to follow on my side, so there was – stroke had the oar going out to the right and I had the all going out to the left and so I was just synchronising with one person in front of me and no oar to clash with, so the person behind me had to avoid my oar rather than [laughs] – so if you’re in a – an eight boat then you’ve got three other oars in front of you to avoid if you’re a little bit slower getting out of the water. So it’s just you have to concentrate slightly differently.

Right, yeah.

Since I was used to single sculling around it was sort of quite a discipline to – to go with, what somebody else was telling me to do, but it was good fun and we went – I think it was in my first year, we went to a regatta in Reading and when I was going back up to college in the evening, I met my old PE mistress on the – the station platform and she said, ‘Oh hello, how – how are you getting on at university, are you enjoying it?’ and I said, ‘Yes,’ she said, ‘Have you been home today?’ and I said, ‘No, I’ve been participating in a regatta,’ she sort of nearly fell off the platform because I had not been a sporty type, I – I enjoyed tennis but I didn’t like hockey or netball or … athletics, so I’d always been considered as the sort of British person who would have – would have avoided [laughs] PE if possible, so she was quite amazed to find that I was actually taking part in a physical sport. So it sort of increased my horizons when I went up to university in that respect.

[1:14:44]

The other society that I joined was the student geological society which had monthly lectures and that ultimately led to me joining BAS, because in the third year I was secretary of the club and somebody had suggested that the chief geologist should come to Bedford College and give us a talk about the Antarctic, and the committee always entertained the speakers to dinner in a local pub afterwards and he happened to
mention that he was looking for a female graduate to come and do some work for him in Birmingham, because the British Antarctic Survey was based at the University of Birmingham then, to help him edit geological papers and do a little bit of research. So when I wrote back to him and said that – asked him for his expenses and I said, ‘Oh I’d be quite interested in this job,’ [laughs] and sort of it went on from there so it was [laughs] sort of fortuitous the way one thing moulds into another really, how one progresses in ones life, just by sheer sort of fates, business of being in the right place at the right time [laughs].

Why was he looking for a specifically female graduate?

Because, he had had a number of male graduates who had all got so interested that they joined the survey to actually do surveying work in the Antarctic, so they’ve all hoofed it off to the Antarctic but women couldn’t go to the Antarctic in those years so he felt safe by employing a women, ‘cause he knew that they couldn’t go [laughs] so he’d get some sort of continuity of work in that respect, he hoped.

[1:16:51]

Was – this head of geology, was this Ray Adie who came up to the talk?

Yes, that’s right, hmmm.

Do you – do you remember the talk?

I think it was just basic Antarctic geology, the whole continent, you know, how – what was known about the geology at that time, which was pretty minimal actually, and how it fitted into the southern hemisphere geology and Gondwana which was the ancient southern continent.

So there there was something of continental drift, if not plate tectonics?

Yes, yes. Well he was a South African and he had been at university in South Africa and I suppose he was sort of more attuned to the disparate southern hemisphere
continents than perhaps the UK geology lecturers were, you know, I think probably because of that physical location in the south that he had had a better feeling for how it was happening.

_Hmmm, was there do you think – in South America was there – was there a kind of discussion of this sort of thing which is entirely separate from the –_

I don’t know.

_Sort of transatlantic –_

I don’t know.

_Interesting. And what did he look like as a – as a person, Ray Adie at that time?_

Well he was quite an avuncular looking person, was very charming to females, he – he seemed very kind and … I didn’t see any difficulty in working with him.

_And the entertaining him after the – the talk to –_

Yes, he was quite good company then. He – he was – I mean when I got to – to work with him, he was still always very polite and kind to females, but because he felt more secure I think in their company, whereas the – the young yellows who work with him and had been in the Antarctic and had been down there for two and a half years and using their own initiative and commonsense doing things, when they came back and were told, you know, we do it this way and we do it that way, then they didn’t take too kindly to that and being – young males would tell him so, so he sort of got a little bit taken aback and perhaps on – felt on the back foot with them rather more than with me.

_Before we – that’s very – obviously that was going to be one of my questions how you ended up applying for BAS as opposed to any – anything else, so that’s covered._

[1:19:37]
But if we just finish at university, you notice – you mentioned that you shared at one point I think in the first year accommodation with a history student?

Hmmm.

Could you describe your accommodation arrangements over the three years?

Well I was very fortunate that because – I suppose basically I came from a single parent family, although one didn’t think about it like that at the time, I applied to be in a hall of residence rather than sharing accommodation in a – a flat anywhere and I got a – a place in the hall of residence attached to the college in the middle of Regents Park, so it was a fantastic place [laughs] to actually live for three years, right next to the lake in Regents Park. And so for nine o’clock lectures I just had to fall out of bed, put my clothes on and walk round undercover [laughs] into the geology lecture rooms which were on the same side as the – the college as my hall of residence, so it was an old Victorian building and we had a – a large room, probably about this size, about fourteen foot square, with tall ceilings and it had a nice lot of windows on it ‘cause it was at the end of the wing, had a coal fire, you were allowed a bucket of coal a week, most of which was slack, so you didn’t get a great deal of heat out of it, but then you weren’t expected to use it except at night. So we had a bed each and there was a – a table each I think and a chair. And there was a loo and a bathroom down the corridor and there was a small kitchenette opposite our room on a stairwell which had a couple of gas rings so you could cook up your own supper if you wanted to. But we were expected to attend formal dinner four nights a week when one had to put ones gown on and behave like young – young ladies and dinner was … [aeroplane in background] [laughs].

Is that Catterick?

Yes. Dinner was you – one person from each long table went and collected the food and then it was served out at the table, and there was a high table with the warden of the hall and perhaps a guest and then there would be, I don’t know whether it was four or six students, would be invited to go up onto high table and make polite
conversation. Which I found absolute purgatory, I was no good at small talk and this happened I think once a term it came round, you know, it was all organised by the warden. Grace was a warden of a sub-residents just round the inner circle from college, so if she was on high table at the same time then, you know, I was more relaxed and had somebody I knew that I could talk to about [laughs] things, and she was a very jolly lady. But the food in – in college was not that great and both my roommate and I decided that we couldn’t be bothered with all this waste of time of sitting in formal meals so we tended to cook up on the gas ring instead of attending and would just go down on the informal nights and grab a meal when we wanted it and go back up to our room again and do studies. So then the second and third year we moved into separate rooms, adjacent to the one that we’d been in, so we still had a sort of little suite of [laughs] handy access to the – the kitchen and continued our existence that way. So I was in halls of residence for the whole three years which was very – very fortunate, I didn’t realise how lucky I was at the time.

_How often were the formal meals, when you said you had to put the gown on?_

Four times a – four evenings a week.

_Hmmm, and how did you feel about that sort of dressing up aspect of it, leaving aside the, you know, the fear of having been asked up onto high table which I –_

Well I didn’t mind it, you know, I’d – I mean it was just a – a gash old gown that one had and it didn’t – it covered up what you had on underneath [laughs] so you didn’t really need to make a special effort, unless you were on high table and then you had to make sure you had a clean white blouse or something and a – a decent skirt on. But it was just that they took so long these meals, so that – that was really the length of time for not very good food [laughs].

_And did you talk with your friend the historian about the – your very different subjects, was that ever something that you discussed and what I’m thinking is this – this wasn’t very long before people were talking about the two cultures and I wondered whether science and the arts were – you know, the difference between the subjects was discussed at that time and in what way?_
Well I think Jann was – is – my friend was Jann with a double N because her name was Jacqueline Anne, so it was very confusing for people to have two Jann’s in the same room. She was actually doing history of science as her speciality for her history course, so she was interested in science and she used to ask lots of questions about what I was doing and how the subjects were developed, but I don’t think I was interested in her subject in the same way at the time. I mean I’ve got interested in history subsequently because I can see how, you know, the world relates to it, but as far as I was concerned, history started where geology stopped so [laughs], you know, there was that division as far as I was concerned as a student. And … she had quite a few friends doing the same course in – in the hall of residence I think so they used to come into the room, so there was generally more discussion about history and arts subjects, but nobody doing geology was in the hall of residence beside myself, so again I was a bit of a – an oddity in that respect. I mean there were scientists but not – not geologists.

[1:27:01]

*And could you tell me about any significant relationships over your university years, boyfriends and – ?*

No, I didn’t have any boyfriends at – at university … and Jann and I still correspond at Christmas [laughs] so we keep in touch that way. I lost contact fairly quickly with the fellow student, honours student, she got married not long after we graduated and I think she – she started a family so she didn’t continue in her geology career. One of the mathematic geology combinations became a librarian and moved up to Scotland, so I lost touch with her a few years later, and the other lady … I do still correspond with and I can’t remember how she used her degree, ‘cause I only met her again in 1999 so we sort of renewed friendship again then but she by then had a family and a husband so I don’t think I know quite how she – she developed after she first left university. So those are really the – the people that I’ve kept in – in touch with, and Grace, who I still correspond with.

*How often did you go home from university to –*
Once a term.

And –

We were only allowed once a term out from the hall of residence. And I think you could have a – just a number of late passes from – for a night out during the term, so it was a [laughs] – a bit of a gated society in those days, a ladies college.

Just in order to go out into London?

Hmmm, if you wanted to come back after ten o’clock or something like that, you know, it would be – or was it eleven o’clock, I can’t remember. And then there was a duty of being on telephone duty for the whole hall of residence a couple of times a term, there were two little cubicles at either end of the hall of residence and you had to sit near one of them and if the phone went, you know, you said, ‘Who do you wish to speak to?’ and then run up [laughs] several flights of stairs to see if the person was in and tell them that they needed a – they were wanted on the phone [laughs] so it was a bit of a – an archaic system [laughs], and you couldn’t really do very much studying when you were on duty ‘cause you would be sort of reading a – a paper or making notes and then the phone would go and you’d forget where you’d – you’d go to and you couldn’t go back and sit by the cubicle until it was vacant again [laughs] ‘cause you could hear what the conversation was. So that was a bit of a disruptive evening. But there were the – what else went on in college? But it was pretty much as I said before, it was a bit like an – an extension of school that one was there to study and while nobody made you study, but if you were conscientious you just packed in as much as you could, reading, and because of the practical nature of the work there wasn’t much time – you were either in lectures or in practical sessions, so if you wanted to do any reading around the subject you had to do that in the evening.

Did you have sort of favourite geological texts?

… No, I just think I read everything that was on the – the list and then went through various references that – to extend the subject.
And did you have any geological heroes or heroines if you like, were you aware of geologists as individuals, individual scientists at that time?

… Well I suppose the name that a lot of people – names that a lot of people talked about at the time were Wager and Deer who’d done a lot about layered intrusions in – I think it was Greenland, and they became – I think they – their papers were so well referenced in everybody else’s work in petrology that they just became sort of part of the [laughs] – the background to anything, any discussion about it. I think the Prof was pretty much an instructive person to follow because he’d worked with such exciting rocks and had a – a good way of putting things across and making them seem clear.

Professor King?

Hmmm.

What was that particular way of getting things across?

[Laughs] He was interrupted by coughs [laughs] and so you had time to assimilate what he’d said before he moved onto the – the next point but I mean he – he didn’t over egg the – the statements, they were fairly pithy I think. So you didn’t have to dissect them too deeply to understand them.

The description of the halls and the – and the formal meals and – and so on, it sound – I think it will sound quite orderly to sort of a young audience listening to a recording, is that a sort of correct impression of it?

Yes, I think so, that’s why I say it was really like a continuation of being at a – a school in a way that your life was – in you chose to do particular subjects then that was dictated by the – the course schedule and if you wanted to succeed then it was up to you to attend all of it, I mean some people might have hoofed it off to have a good time around London but it was really only after finals that I realised that I’d been three years in – in London and I hadn’t been to all the wonderful museums there were,
so I sort of had an orgy of going round [laughs] the museums then, I’d been to a few
concerts and – and musicals in – in the intervening years but not a great deal.

Were there people who were sort of transgressing the sort of expected – this kind of
expected orderliness of the things and the pass system and so on, who were – who –
as you put it, hoofing off into London?

I’m sure there were. None of my immediate acquaintances were like that … that I can
remember. But there were some – I know there were some of the arts people’s who –
arts students who were – had a less exacting schedule of lectures and were left more
to their own devices, so it would have been quite difficult for some of them to sort of
keep slogging away at it and reading interminable books on their subject, they’d –
they’d go off for a bit of light relief I’m sure, so they had to be even more disciplined,
self disciplined really than – than I was because I – my movements were really
dictated by what the – the course had imposed on it. And I had the – the boating that
– that took me out of – of college once a week and there were the – the field courses
so, you know, I wasn’t stuck in college all the time like perhaps some of them would
have been.

Hmmm.

[End of Track 3]
Hmmm, you’ve mentioned a little bit the reason why you went from university to BAS rather than looking elsewhere but could you just go through the process of applying for and getting your job there at BAS in 1964 when you graduated?

Hmmm. Well I think most of the staff assumed that I would stay on at Bedford and do research for a PhD. I didn’t feel particularly confident about doing research, I didn’t think I had … quite the right sort of inquiring mind, I was very happy doing practical things and sort of researching papers but I didn’t know that I’d have the inspiration there to – to do a PhD. And again there was a question of funding and whether – I had a – a full grant to get me to university but I wasn’t sure that I’d get one for doing a PhD and so I thought looking for a – a job, and I think I had made enquiries about doing fieldwork and it always seemed that it was not for women. I can’t really remember the details, I just sort of felt that when this opportunity to do something with Antarctic geology, which was again different from what most people would be doing, would be an interesting interim measurement until I thought about something else. And so in the December … excuse me [moving position], right, when I wrote back to Dr Adie about his expenses and said that I would be interested in applying for the job, he wrote back and he said, ‘Well perhaps you’d like to come up to Birmingham during the Christmas vacation and I’ll give you an interview,’ so we arranged a date and it wasn’t a very propitious beginning because I had to change trains at Oxford from Reading to catch a train to Birmingham and I missed the connection, so I arrived on the next train [laughs] and had to phone him from the Snowhill station saying, ‘Sorry, [laughs] I’m a little bit later than I expected,’ so that wasn’t a very good beginning. But he asked me lots of questions I suppose about what I’d done with my degree course and what my English was like, since he wanted an editorial assistant, and at the end he said, ‘Well we’ll let you know when we’ve interviewed other candidates.’ Well I didn’t hear anything until … middle of May just as I was sort of in the final throws of revising for my finals and he offered me the job, he said that they’d finished interviewing, which meant that there’s been one other candidate and they’d interviewed her and they were going to appoint her as well [both laugh], but I didn’t discover that until I’d started. And he wanted me to start as soon as I had graduate in the July, which is when all the new recruits at the British
Antarctic Survey started, but I had already agreed to go on a – a touring holiday with my mother and uncle with the uncle’s caravan up in Scotland, and my grandfather died just as I was starting finals, so I think they both wanted to get away anyway, he had been ill for some time. So I said no I couldn’t start until the middle of August and that’s when they … took a few belongings up to Birmingham and I was in a – I had a room in a private house in Edgbaston and a month later another female geologist from Edinburgh arrived and I – I was to be Dr Adie’s editorial assistant and also do a little bit of description of thin-sections when needed for publications. The other girl was a Scottish lass from Edinburgh and she’d been at Edinburgh University, her name was Nean Allman, Nean being an abbreviation of Nora Jean and she came to work on a volume on the geology of sub-Antarctic islands, it was a John Wiley sponsored contract I think, for a year. Now although I was working for Dr Adie, he was a BAS geologist and as far as I was concerned I was working for BAS I actually had a university appointment, I was a research assistant at the University of Birmingham, but seconded to the British Antarctic Survey. So I had slightly different working contract than all my fellow male geologists. And I think Nean’s was the same, you know, she was on this one year contract and we shared a – an office eventually when in – there was a new section in the geology department was being built so we were in little corners until that was complete and that was probably, I don’t – October or beginning of term probably when it was finished and we moved into that … and Nean and I hit it off very well ‘cause we were contrasting people and she was very much … in for female equality and very – she didn’t – she wasn’t shy about saying what was – what should be right, you know, whereas I got angry about it but was a bit more quiet about it [laughs], anyway, she didn’t stay very long, after a year she got frustrated because Dr Adie wasn’t showing enough interest in the work that she was doing, he was very difficult, he was so busy, he was away quite a bit and he had a number of the geology – male geologists who he was overseeing as PhD students and … he would be quite difficult to gain entrance to his office, but once you got into there it was difficult to get out again [laughs] ‘cause he’d be talking about this and that, but never what you wanted to hear. So I think she got a bit frustrated that he never had time to really take any interest in what she doing, and she was offered a job in Toronto on a mining journal, the Northern Miner, so she upped sticks and went to Canada and pursued her career of getting women accepted in mines in – in Canada, so she did quite a lot for the equal opportunities for female geologists in Canada. And has
always been very supportive to me of, you know, what I should be trying to get to achieve, so she still visits us here and we’re still good friends. I was left behind and I was doing fairly basic editorial work for Dr Adie, he was – he found it difficult to relinquish jobs to other people and so I would check references and sort of maintain cartographic quality from the draftswoman and occasionally do these thin-section things – work, but – so it was a bit varied and I quite enjoyed it but it wasn’t overtaxing.

[09:17]

And then in – just about the time that Nean left I think was when Dr Adie was asked in his position as UK representative on the SCAR working group on geology, and SCAR is the Scientific Committee on Antarctic Research, he was asked to participate in a – a mapping programme of Antarctic geology and he was asked to provide a synthesis of the known geology of the Antarctic Peninsula. And so my job was to produce onto a single sheet, eventually, a series of maps at one to 200,000 scale from all sorts of publications, preliminary reports and published reports that the various BAS scientists had – had produced whilst they were employed, covering the Antarctic Peninsula and it was very bitty, we did it that scale and then it had to be reduced to – I think it was one to a million, so it was incredibly vague actually [laughs] and it came out in two sheets in 1972, and this was ’65, ’66, and I remember being extremely cross because it came out compiled by R J Adie with no mention of me or the other girl who then [clock chiming] joined us in the works, so I think that was a bit unfair [both laugh], but that was the first geology Antarctic mapping project that I was involved in.

[11:09]

And because Nean had left I think Dr Adie was hoping to keep me, he suggested that I did a – a masters on a collection of rocks that had come back from the South Orkney islands and had not been worked on, so I thought, oh well, I might as well stay for a couple of years and do that and it was on a part-time basis so I could do it during working hours whenever I was not needed to do things for him. And it was by thesis so you produced a thesis at the end of two years, and that was fine to begin with
whilst I got my head round what the collection was and there was a – a rock cabinet was moved into my office and drawers full of all these rocks from the South Orkney islands but what he failed to give me was any field descriptions that the geologists had made, and it’s very difficult to get a true geological picture out of [laughs] a collection of samples when you don’t really know the context, or when you don’t know the context at all. So I struggled as best I could and I found a … one of the geologists who returned had done some work on that and before he left to go to the Antarctic and he gave me a copy of a map he had made of stations that some of the samples had come from, so by elimination I had – I knew what – what came from that island so I assumed all the others came from the other islands in the South Orkney islands.

[13:00]

And then Mike had been in the Antarctic when I joined, he was there for two and a half years and when he came back … apparently the rumour had gone around the geologists in the Antarctic that Dr Adie had employed some female geologists and there were various array comments about, ‘Well they must be a bit like Russian discus throwers, you know, pretty heavyweight people,’ [laughs] ‘cause that was the – the image apparently that the men had of what a female geologist would look like, so they were a bit surprised when they came back [laughs] and found we’re actually quite normal females [laughs]. So I – I met him for the first time in – in ’66 and the situation with the men was that they were down in the Antarctic for two and a half years and then they came back and spent a couple of years writing up their work and got a PhD from the University of Birmingham at the end of it, although some people did – they stayed for about three months and then left to – to do something else with their lives, they weren’t interested in doing a higher degree and it was people like that whose collection I was now working on. And Mike used to stay behind in the evenings working on his thesis and I did the same and we met up in the research room and used to have a – a drink, you know, coffee or tea or something and got to know each other and in that way we decided we were going to get married.

[14:50]
But he suggested that I should contact one of the geologists who had collected the samples to find out if he had copies of his field notes that he would send me and that was Drummond Matthews from the University of Cambridge who was actually one of the people that Dan Mackenzie worked with, so he had gone onto great things after he left BAS and he was very charming and he gave me his field notes, he said he wanted them back so I had to make typescript copies of these with all the little diagrams that he’d shown the context of the samples being collected from. And … I think he gave me a – a copy of a dissertation that he had written on the structural geology which helped but I was actually studying the petrology of the rocks, so that wasn’t of interest to him. He had part written a British Antarctic Survey scientific report on the geology of the South Orkney islands and there was another – a geographer, Derek Maling who had also done some work on the islands and they’d written this together and Dr Adie had done some work, so it was going to be Matthews, Maling and Adie, scientific report, but Dr Adie couldn’t agree with the details of the structural interpretation and eventually he withdrew his name and it was finally published just as Matthews and Maling, so in the end – and that was in sixty – I think that was published in ’67 which was just about the time I was finalising my thesis. But I hadn’t seen it until, you know, rather too late for me to – to work with but Drummond Matthews had given me his notebooks and in – before then [clears throat], so it’s thanks to Mike that I sort of thought about actually contacting the guy directly, not that it went down particularly well with [laughs] Dr Adie, because he – for some reason he thought that people should work in a vacuum, it was a very curious way ’cause geology is such a – a practical subject, field oriented, you need to know the context of everything that’s been collected, so it did make it rather difficult to – to actually do much conclusion about the grouping all the rocks together, apart from seeing how typical they were in thin-section and looking at them. And Drummond had given me a box of photographs of a lot of the field locations, so by working with the map of Signy Island and of Coronation Island, I could eventually work out where a lot of these samples had been collected from, so it was quite a detective story in a way for unravelling what [laughs] was going on and it was more difficult than it should have been really, but I did finish my – my thesis in October ’67 and got married a couple of weeks later.
Why did it annoy Ray Adie that you contacted Drummond Matthews for his field notebooks?

Because I was showing imitative I think, I was undermining his authority. He had control of the archive, geology archive and he – he didn’t – because he – I think because he didn’t agree with Drummond’s interpretation of the geology, he didn’t want me to be affected by … a different interpretation from his own I suspect. But it was … this is what it – a lot of the – the – the male geologists found so annoying, that he would hold things within his office that they knew he had but he wouldn’t let them have them because he didn’t think it was right that they should have, so it – it was a very curious … way of going about it for a scientist actually, but I think that might have been his – his background in South Africa where there was a sort of them and us situation, and so it was holding onto power and authority by that process because he couldn’t hold onto it in other ways and – by his presence.

Why could he not hold onto it by his presence?

Because he wasn’t comfortable I think with other people, as I was saying before that the young men would be fairly articulate in their own beliefs and he couldn’t argue, I don’t think, couldn’t follow an argument through with them, he would just sort of close up and get cross, so he felt … vulnerable I suppose in any argument with them, which is strange because I mean he – he was the chief geologist, but he had a closed mind really on the geological interpretation of the Antarctic Peninsula, and it was a very old fashioned way, you know, that anything that was – had been metamorphosed was very old rock and anything that looked young was young, you know, [laughs] and one layer upon the other and it didn’t take into account all of the tectonics that had gone on and could have transformed equally young rocks to look totally different because they’d been affected by heat and pressure.

Could you then at this point then expand on – which may involve just repeating what you’ve said to some extent, the difference between the interpretation of Antarctic geology that Drummond Matthews was suggesting and that that Adie was holding onto.
That I don’t know because I never saw the – the section that Adie had included in the original publication, so I really have no idea what they were arguing about and he certainly never said, and Drummond had moved onto other things by then and he – he just sort of said, ‘Oh Adie, you know, don’t want to talk about him,’ so I think they had actually had quite a difficult time, difficult relationship. But I can’t imagine really what it was, because it was such a small island that they were working on and it was all metamorphosed rocks … there were a lot of folds and faulting, all I can think of is that, you know, Drummond wanted something more complicated than Adie had envisaged, but I really do not know.

Thank you.

[22.41]

Could we start with the – the first job that you did, which was to synthesise the known geology about the Antarctic Peninsula, what was involved in a sort of practical step by step day to day basis in producing firstly the one to 200 –

200,000.

Is it 200,000 scale?

Hmmm.

From various sources, you know, what was your sort of day to day work?

Well first it was to find a publication of a particular geologist, and how it worked was that the – the men were sent down and they worked in a particular area and then the next man to go down would work in an adjacent area and so they finally covered the whole of the accessible part of the Antarctic Peninsula at that time, this was using over snow traversing with sledge and dogs … so there was an awful lot of travelling between outcrops and in one season a man would have perhaps three months in – in the field travelling like that with another colleague and the amount of terrain that they
cover would probably be quite small really, so they would be down for two consecutive summers, covering the same area, operating from one of the main bases in the Antarctic Peninsula. And then when they came back – well even – no, before they came back they were asked to write … I think it was a six monthly preliminary report on what they’d found which was mailed back at the end of the season when the ship left before the winter and Adie had these sort of Roneo copy, photocopy from a stencil and bound into a – a manila binder and they were part of the library, so there were these preliminary reports, there were also field and notebooks which he would reluctantly part with, in fact I’m … no, I didn’t have any of those at that stage, that was a later project when I had access to those, so it was just preliminary reports and published scientific reports or papers in the BAS bulletin, and these included maps that the geologists had made themselves of their area. Now these were sketch maps, not based on published topographic maps and in fact in some cases there were no published topographic maps. The Directorate of Overseas Surveys was beginning to make decent maps at one to 200,000 for the Peninsula, but there were not that many, so as we worked down the Peninsula we had to sort of make up maps at the right scale, topographic maps even then, trying to sort of marry what had been done as a very preliminary topographic map [laughs] by surveyors and incorporate what the geologists had – had done and somehow coming up with something that meant a reasonable … location of – of geological units. So there was a – a colour was – and symbol were agreed on an international basis for each age of rock and one first found the – the maps worked out what the age of the rocks was and then by hand transferred these to the – the topographic maps and they were all sorts of different scales, so we had a pair of dividers so that you could, you know, one end was for one scale and the other was for the scale of the map that you were comparing and you – you did it in a proportional way like that, so it was quite a slow process of – of transferring it. And I guess that took about a year, just slowly going through and … ‘cause searching and then trying to actually work out physically where the outcrop shown on the geologist’s map was on the topographic map was a bit of a challenge sometimes.

[27:38]

*What contact did you have with Ray Adie in the process of doing that?*
Well he showed us where the map – well he gave me a set of maps and [laughs] … they were dyeline copies, not very stable in light and the paper was – it was a rather soft paper so he said that these all had to be specially edged so that they didn’t wear and tear. So there was a plastic strip that went round all of these things and I remember it was – it was a roller that had tape and you turned a handle and the roll of tape went through this pinching system with a sheet of paper between and you sort of went like – turn – turned this wheel interminably [laughs] going round all the edges of these maps and I think there were about sixty maps, and we have white binding for the geological maps and green binding which showed the geological stations, so that you could put the two together on a light table and actually locate where somebody’s sample, a specific sample had been collected from in relation to the geological map. But he – he was always very careful in showing you new equipment as if you couldn’t work it out yourself, you know, he had to give a – a whole sheet display to me before I was allowed [laughs] to use the machine, and what I have forgotten to say is that I think it was a few months after Nean had left, another girl, female geologist joined the survey from Swansea I think where she’d done her – no Exeter, that’s right, her home was in Haverford West and she had been at Exeter, and she came to do some work for Adie as well and she helped me compile the maps to begin with so we worked on this together, which was good because, you know, it’s helpful when you’ve got somebody actually working on the same project as you. One of the things that I did feel – find difficult when I was doing the research on the South Orkney islands is that none of the other geologists there at the time had ever visited the islands and was working on completely different rocks elsewhere in the Antarctic Peninsula so it was not something that I could discuss so easily ‘cause they – they weren’t familiar with the environment, the rock types. So it was – it was nice to have somebody working on the project with me for the mapping. And so that – he started me off with these maps and gave me the code and the colour system to use and that was about it, we were left to our own devices.

And why – why were you not given the notebooks at that stage to help you to – ?

Well it was going – the same process that the notebooks were something that he had and he was afraid, I think, that if he let them out he wouldn’t get them back again and they were a valuable archive and he had no time really to monitor what had gone
where because there was no official BAS archives at the time. So it was only when we moved to Cambridge and we had a proper archive set up and, leaping the gun here a bit but it was when I rejoined to – to work on geology maps that I then had access to all the stuff, because he was no longer in control of it.

[31:39]

And your – the first girl who was working with you, Nean?

Hmmm.

You said that she was happy to say whatever she felt about injustices or things about the organisation that she felt weren’t right.

Hmmm.

Could you think of examples of things that she said and why?

Well I know she was pretty annoyed that there was absolutely no opportunity of women going to the Antarctic, because as we joined there were three men who were going through their probation before heading off to the Antarctic for several years, hmmm, have you heard the term, FIDS, I wonder if in any of your previous interviews, because the abbreviations FIDS means Falklands Islands Dependency Survey which was changed into the British Antarctic Survey after the Antarctic treaty was signed in 1961 and we adopted the name in ’62, but FIDS still was used as a name for the people who worked, so if you were a FID it meant that, you know, you worked for the British Antarctic Survey and amongst the older members of – of BAS, even before we retired you still referred to FIDS, meaning that you were a – an old time [laughs] member of the survey, rather than a more modern one. And the people who joined and did their sort of probationary three months were FIDlets so until you got to the Antarctic you weren’t a proper FID [laughs]. So they were just all sort of getting excited about going off to the Antarctic and we got special dispensation to go down to see them off on the John Biscoe from Southampton, and the ship was berthed in Southampton in those days so we all piled into a – a Land Rover I think and drove
down to Southampton, this is Nean and me and one of the FIDlets and a FID who was sort of going to be able to drive the Land Rover back. And we went onto the John Biscoe and she was berthed alongside the … I think it was the Queen Elizabeth, was it the QEII then, it was a large cruise liner anyway, she looked like a little [laughs] tug beside it and I thought, gosh, fancy going in that all the way across the Atlantic, but that’s what they all did and I think she got quite excited about the sort of going off in the ship, and I wasn’t so sure, I quite liked to do the fieldwork but I’m not sure that I fancied the long sea voyage being cooped up in a ship. So I think that might have sort of got her thinking about, you know, why couldn’t we go, wasn’t that she would have gone if she’d had the opportunity, it was just why couldn’t we go, and she probably made that at various – made that point to Dr Adie at various times.

_Do you know what he said in reply?_

Probably you don’t want to worry your little head about it [laughs] or something [laughs] equally provocative as far as she was concerned, but you just said it’s – you know, it’s … ‘There are no facilities for ladies in the Antarctic,’ that was the – the standard phrase that was trotted out most of the time.

_Wait did the FIDlets say about that themselves?_

I don’t think they really thought about it, it was just, you know, we went meaning they, they went to the Antarctic and the women stayed at home, it’s what a … happened, it was a sort of carryover from it being a service operation during the war and there was still a lot of service oriented approach to the way the survey was carried out I think, and since women weren’t in the services why should they be in the – well in the services that went overseas, you know, why should they be considered for the Antarctic, they wouldn’t have been allowed on the ships. So I think it was quite some time before people began to think that it was rather strange.

[36:38]

_Had Ray Adie had a military background?_
Don’t think so. Because actually being in the Antarctic was considered the equivalent of doing a two year’s service anyway in one of the armed services. I don’t really know actually.

[37:00]

*And do the – the rocks that you worked on on the next step, the masters work, where you were examining the rock samples brought in the – the cabinet, were these Drummond Matthews’ samples and that explains why –*

Yes. The greater part of them were but there were a number of small collections that had been made by other people but I think the majority were his.

[37:26]

*And – and at this time you say that you met your future husband –*

Hmmm.

*In the coffee room, in the research room?*

Well he – he was a FID who’d come back after two and a half years and right from the start Nean and I were invited to join the FIDs for morning coffee and afternoon tea, which was in one of the research rooms in the geology department and Mike happened to have a desk, there were about six geologists sharing a – a research room and there were two research rooms that the BAS geologists were in and there was a third research room which was university PhD students, so we didn’t have much interaction in that room but research room one was where everybody gathered for – for coffee and that’s where Mike had a desk. [clears throat]

[38:31]
Could you say something of the sort of informal culture of society – sort of social at – the atmosphere of that research room one, the sorts of things that were discussed, the people that were there, the tone of it all?

Well there was always a lot of sense of humour, a lot of teasing of each other and so it was a nice atmosphere, because it was really a continuation of life on base as they had experienced over a – a long period, so they had a shared … a shared experience in the Antarctic, even if they hadn’t actually been together in the Antarctic, you know, they all – and they could have been at – all at different bases, but life on each base was fairly similar in that there would be a small group of men, all catering for each other in – in turn over the winter and then being in small units in the summer out in the field and working with dogs so [clears throat] there was a great deal of camaraderie and it was nice to be part of that … they usually – interestingly now, they all had a sports jacket and wore a tie, which is not how the average research [laughs] student appears now, and it was just part of the expected – what was expected of you in that period, how you were expected to dress. There was a lot of Antarctic slang used which it took a while to get used to, it partly derived from services slang and made into its own on each base, and I mean I’ve got so used to it now [clock chiming] I don’t even notice when Mike comes out with these words but, you know, when we’ve got non-Antarctic people with, what on earth’s he on about? [laughs]. You just … it sort of – it added to the humour really when they – they had all these different words for things. And …

Such as – what were the examples of – could you give me some examples of those words?

Hmmm … well do you know what a gash bin is?

No.

Waste paper basket. Gash being anything that is thrown out like food at the end of a – a day and it just – it’s the other word for rubbish, you know, so … that was one example. [Laughs], a rather more amusing one is shreddie, which is underpants because when you went off to the field for several months you didn’t change your
underwear probably so when you came back [laughs] they were a bit shredded and of course there’s the breakfast cereal called Shreddies and I remember going into the grocers in Selly Oak [ph] and asking for a box of Shreddies and there was one of the FIDs standing beside me and he turned round and grinned and said [laughs], ‘Do you really want a box of Shreddies?’ [both laugh] [clears throat], so we were having a good giggle and of course nobody else understood what on each we were talking about [laughs]. Hmmm, mank means cloud, low cloud, so it’s a manky means that there’s nine tenths cloud probably, today is a bit manky, or has been, so you know, just things – things like just the odd word into a sentence can actually make it unintelligible to the people who don’t know that particular lingo.

[42:44]

*When I was asking about your friend who might have said to Ray Adie, why can’t women go to the Antarctic, and you said that his possible response would have been don’t worry your head about it.*

Hmmm.

*Well that – that suggests a particular attitude to women and their role and their capabilities and so on, did you experience that or similar view – attitudes to women from other FIDs, for example in this informal atmosphere of the research room?*

No, I don’t think so. No. They accepted that we had degrees in the subject and we were doing bone-fide science and so no, there was no – nothing like that, I don’t recall being aware of any attitude like that. But it was just that the way it was was that they went to the Antarctic and the women didn’t and they didn’t particularly question that attitude.

*Is there a generational difference then in the – in the attitude and so that it was – is Ray Adie older than these?*

Yes, hmmm, by about twenty years probably. I suspect he was in his mid forties when I joined BAS.
This time did you have contact with other senior members of FIDs or BAS?

No, no, because at that time BAS was distributed around various universities, upper atmosphere physics was in Edinburgh I think, biology was in St Mary’s College in London, before it moved to Monkswood in – near Huntingdon, geophysics was in Birmingham, in a separate building, a small prefabricated hut across the way from the geology department. And botany was in another section of … the University of Birmingham, almost off the campus in a little old building which had a nice garden attached to it, called Winterbourne, but we didn’t have a – we didn’t meet for coffee or anything like that, there were diff – definite groups and you didn’t interact too much … until you went away to conferences, which came later.

The director didn’t visit at this stage to –

He visited Dr Adie but he – and he saw the men but he didn’t come to specifically see us. There was one occasion when he had – had come up and he invited the … the geologists to have a beer with him in the local pub, and I was married by then so it was, you know, we’d been working quite some time before I met him and Sue West and I went and we sauntered in and sat down and he was already in there and he said, ‘Oh, I didn’t know BAS employed women,’ [laughs] [inaud] [laughs]. And strictly speaking BAS didn’t because we were still on the University of Birmingham payroll, but we were seconded to work with BAS, so we regarded ourselves as BAS employees [laughs], so he was very much a – one for the – talking to the chaps and I think we rather spoilt his – cramped his style by being there at the time. But I think that’s about the only time I really interacted with him at that – that stage.

Did he say anything else to you at that meeting?

No.

And what was your – what was your memory of what he looked like?
… He was very sunburnt, had a pipe which he used for pointing [laughs] and really was quite a charming man, I mean he – he was – it was obvious that the – the men enjoyed his company, they responded to him very well and there was quite a lot of laughter, so I think he was one of those men who could talk to the troops very easily, unlike Dr Adie who found it very difficult, so there was a good bonne amie and he was a – a leader of – of men I think.

Thank you.

[47:40]

And you – you said that you’ve started to get to know your future husband in the research room when you were both working late, and then the next thing was you decided to get married, I wondered whether you could fill in the – fill in that a little bit and say how the relationship developed and – ?

Well I suppose we found that we had the same sense of humour whilst we were talking over coffee in the evenings. And we had the – the shared degree course and interest in the Antarctic, and neither of us had had relationships before so finding the excitement of having [laughs] a relationship develop … and we used – we used to go out on walks on a Sunday, take a bus out somewhere into the countryside and go for walks, which we both enjoyed doing walking, so was another shared interest there, being in the countryside, although Mike came from London so I mean he’d never lived in – in the country, he’d always lived in London and then gone to university in Birmingham, so the Antarctic was his first escape really from city life. So we sort of decided that perhaps we should get married, but we kept it secret from our colleagues, nobody knew that we were going out because … in the civil service at that time you couldn’t be married and stay in the same unit, so the wife usually had to move on somewhere else and I wanted to make sure that I got my thesis out of the way, which is why we – we didn’t tell anybody until – well we went in and asked for – we had to work on Saturdays in those days, Saturday mornings and you were allowed one Saturday off a month but you had to tell the – Dr Adie when – which Saturday you were going to be off, and Mike went in and said that he would like to have this
particular Saturday off and Dr Adie said, ‘Yes okay,’ and then Mike said, ‘So that I can marry Miss Brown,’ [laughs] and – and he said, ‘Well I think you better have three days off as well after that,’ so he was quite gracious in – in accepting the fact. He told – he said to me when he called me down, he said, ‘I gather you’re [laughs] getting married on Saturday,’ and he said, ‘you know that normally you would have to leave once you got married,’ but I think because I was a university appointment it sort of saved the situation at the time and once we came under the jurisdiction of the Natural Environment Research Council it wasn’t quite such a rigid thing as the original civil – crown agents civil service sort of setup. So I was – I wasn’t put on the – the scrapheap at the time [laughs]. But that was how we – we wanted to keep it secret because – well if things hadn’t worked out, we didn’t want the embarrassment of colleagues knowing that we had been going out together and then had decided not to.

Hmmm.

So how it ended up.

[End of Track 4]
Okay. So this is the – the second session and I understand you have some – some additional comments on some of the questions that I asked yesterday.

Yes, you asked me yesterday what – if I could remember what sort of gadgets my mother had in the first home that I was in up to the age of nine and I remembered two things; there was a toaster that we had and it had little doors either side of the toaster and you put the bread on the door and there was a – a hinge at the bottom and then you put it up against the exposed element, closed the door on either side so you could do two pieces of toast either side, but of course it was pretty fierce according to modern [laughs] technology ‘cause you could have touched the – the bare elements and you couldn’t see the colour of the toast until the smoke came out of the top [both laugh], so I think that was – there were not that many houses at the time that probably had a toaster ‘cause this was just after the war. The other thing was that during the summer, the only way of heating the hot water for washing was an emersion heater in the hot water tank and that was very expensive to run, we probably only had a hot bath once a week, so unless my mother was doing washing we didn’t have hot water and if we wanted to wash hair, there was a sort of element on a stick that you put into a basin of cold water and switched it on [both laugh], ‘cause there would have been a – the power socket was – it was a round plug that fitted into the light element in the bathroom so you had this cable covered in fabric that hung down from the light fitting in the bathroom and the – the … little heating element with its exposed elements again was put into the water and when it started bubbling you knew it was warm enough. And I guess mum probably tested the water with her finger just to make sure, which again wasn’t brilliant, electric and water and humans [laughs] and you’d switch it off at the – the wall switch and there you had hot water.

Hmmmm.

I have seen similar things recently where you can plug into a car, cigarette lighter so that you can warm your water actually in the car, but I’m sure that it’s a much safer [laughs] system than – than we had in those days.
How do you account for the fact that you think you were among the first to have a –
this electric toaster for example that –

I suppose [clears throat] that friends that I visited didn’t have them. I don’t really
know why I think that. It was a very early model and … hmmm, I don’t – I think
electrical items were not very widely available at that time, just after the war.

I was wondering then why you think that your mother invested in one?

I suspect it was my father, he liked – he was a bit of an inventor himself and he
probably would have brought these into the home, so it might well have been from
before the war actually and it was just part of the family equipment that came into the
house when we moved into this semi-detached house in – in Amblecote. And I did –
did remember some – one other thing showing the sort of hard times that my mother
had, that it must have been before my brother went away to boarding school when he
was thirteen that she took in lodgers, so it would have been before my grandfather
came to live with us, and they were a Polish couple and they had the front room
upstairs and we children didn’t particularly enjoy their – their company, you know,
sort of strangers coming into the home environment [laughs] and I remember my
brother had a model railway up in the loft and he used to go up there and play so that
the track would be whizzing – the trains would be whizzing round in the track above
the – the bedroom that these people were occupying, I don’t think they stayed very
long [both laugh]. So those are just a few snippets more from the – the early life.

[04:52]

And the – the other thing was that perhaps you could give us a sense of the difference
between the geology departments, one at Bedford College and the other at
Birmingham which was where you joined as an employee of BAS but a research
assistant of the university.

Yes, it was [clears throat], I think it was then that I – excuse me, I’ve got a frog in my
throat.
That’s okay.

[Clears throat]. Was then that I, hmmm, I think I better go and get some water [laughs].

Yeah, sure, switch it off –

The department in Bedford College had been small as I said and we had just one female lecturer but all the students were female and everyone was called by their Christian name, it was just a sort of family environment. When I moved to Birmingham the department was on three floors, whereas it had just been a single storey at Bedford, [clears throat], all the staff were male, all the students were male, all the research students were male, so I think when I first went there I probably was the only female geologist and there probably would have been about a dozen students in each year, about six research students and … probably seven or eight of the FIDs doing PhDs. There’s – the – the secretary to the professor was female and there were two female secretaries for the rest of the department and a female draughtswoman for Dr Adie for his publications, so it was very much a male orientated setup, very formal, I was called Miss Brown, not Janet, all the men were referred to just by their surname, no Mr and no Christian names, so it was totally different and I did feel a little bit awash and it made me begin to appreciate that men were dominating [laughs] the scene rather than females.

And the formality of the department, the sort of – the formal culture that existed there, did you have any sense of who was setting that or what had established that or who had established that?

Well I think to a certain extent the formality was within the BAS group of geologists, set by Dr Adie, because I think the staff on the university side eventually called me by my Christian name, but Dr Adie was always very formal with all of his staff. So when I married I was Mrs Thomson, never Janet and, you know, I worked for him for about twelve years so it was – it was rather strange really.
And was this a – a formality at – I know that you were just working in the Birmingham part of BAS at this time but did you sense that this was a kind of formality across BAS or within Ray Adie’s department at Birmingham?

I think it probably was throughout BAS because at that time we were still sort of within the civil service setup which has always been very formal, so I think that’s where it was and it wasn’t really changed until the survey came together within one building in Cambridge and then it was much more relaxed, and by then we had a different director anyway and … Dr Adie was no longer the – in charge of geology and sciences, and Charles Swithinbank had taken over and since he’d worked with the Americans, you know, he was [laughs] – had a rather different approach anyway so I think there was a greater influence from outside social culture, moving into – to come into the BAS culture.

What influence did Vivian Fuchs have on the culture of the department of geology that you were working in?

That’s difficult to say [clears throat] … because we rarely saw him and at that time … I was just a sort of very junior person, you don’t know who’s setting the rules really, it’s only with hindsight you – you feel the influences that there were. He was based in London at where the administrative centre was in – near Victoria, lived in Cambridge and so he hardly ever came to – to Birmingham. I really couldn’t say.

Hmmm, and did you have any sense of the relationship between Ray Adie and Vivian Fuchs?

I think it was a slightly tense relationship. They had worked together in the Antarctic in the ‘47, ’48 period, they’d sledged together [clears throat]. But I … I don’t know why, I think that perhaps Dr Adie was disappointed that he wasn’t asked to go on a trans-Antarctic expedition with Sir Vivian Fuchs … both being geologists probably he hoped that he would have had a – a chance on – on that expedition, but I really don’t – don’t know, I mean that was surmise [laughs].

Yes.
Could you say more about real – the realisation that the geology department was male dominated, what – what – what did that mean in effect, the fact that it was male dominated?

... Well it was just that, you know, when you walked down the corridor you didn’t see another female face and in the first month when – before Nean arrived on the scene, you know, I did feel a bit out on a limb ... I ... in later years that it – it had a different ... influence on my career, because I couldn’t go to the Antarctic I couldn’t take on any sort of senior role of managing geologists because I hadn’t got the experience in the field so in a way that sort of stymied me for doing anything in the – the first years of – in a managerial role, but that didn’t – you know, I didn’t think about that at the time but it was one of the knock-on effects really.

And what about the sort of general feel and culture of the place compared to the Bedford College at – sort of atmosphere, what was the ... could you say more about the sort of change in atmosphere from a place that was full of female students and this informal culture to a department that was full of men and ... what effect did it have on the sort of general atmosphere and sort of society of the department?

Well it was – it was slightly strange in that ... the department always wanted more space and therefore they felt that with the BAS geologists there, we would take – occupying space that could have been used by the department, so there was a bit of a friction between BAS and the – the actually staff, geology staff. More on a – a sort of general basis rather than personal, but I think it was partly aggravated by Dr Adie being ... well I wouldn’t say not communicative but he ... he was a little tense in dealing with situations if they arose where people made sort of snide comments about [laughs], ‘Oh well that’s BAS geology taking up space,’ you know, you couldn’t override it by laughing it off and saying, ‘Well you’re jolly lucky to have us here, we improve the profile of the – the department,’ so there was some of the younger members of staff I think were disappointed that we were there and occupying space, so there was that sort of friction in the background all the time and it was much better
really when we had our own building in Cambridge and we were there and everybody was together from all the different disciplines, so … that was the overlying culture, but on a personal basis everybody was – was fairly happy go lucky, geologists are pretty good, you know, they sort of knuckle down and do what they have to do and there’s always a good sort of camaraderie amongst people of your own age.

*And how did you find the difference in sort of chatting over breaks and coffee at – in London with fellow female students to chatting over breaks and coffee in Birmingham with other male geologists, in terms of the sorts of things you talked about, the tone of conversations, the –*

I don’t know that I really noticed any difference actually. We never had a great … we – I don’t know – I don’t recall having any coffee breaks in the department [laughs] in Bedford because you were always sort of rushing from one lecture to another or going onto a practical or something, so it would only be over lunch and you tended to – with just the two of us we usually joined a group of other people at a table so you weren’t necessarily talking about geology. And in … in Birmingham I tend – I think we tended to listen to sort of tales of the Antarctic most of the time [laughs] at coffee breaks, somebody would sort of start off on a topic and be lots of fun and it was – it was a good atmosphere, but that was amongst the – the BAS geologists and we tended to be just a group, we didn’t take coffee with the – the other members of the department, because again there was a bit of a hierarchy. If you were a research student or a research assistant, you had to use the main dining – student dining hall and all the staff would go off to the staff senior common room in the staff house, so there was a – a sort of dichotomy there anyway of a sort of hierarchical system and … it – I think it was just about the time I’d joined when the FIDs decided that they would buy a kettle and put it in their research room one and we started having coffee breaks in there, and those FIDs who were in research room two came along to research room one and Nean and I joined as well so there was quite a crowd in there and there wasn’t really room for any of the other research students to join in. So it became a – a sort of segregated little society [laughs] within a bigger department.

[17:36]
A couple of – three years later I was in – promoted and – now what was my title then … probably research associate or something and then I became a member of Staff House, but I couldn’t – and I was married by then and I couldn’t take my husband in because he was a PhD student so, you know, if he had been sort of a dustman doing the rounds in Birmingham, he could have come in as my husband, but because he already had a status in the university that was not allowing him in his own right to use the Staff House, he couldn’t go in so I didn’t go in [laughs]. It’s one of those – I’m sure it doesn’t exist now but that was a sort of setup in the 1960s.

_Hmmm, thank you._

[18:31]

_When you were listening to these conversations or these stories of Antarctic travel in research room one, can you remember what you felt about them?_

I felt very envious that, you know, I couldn’t have partaken, have participated in it. So that was the beginning of wanting to go really … and also there was the frustration of working on rock samples and not having collected them myself, not having a good feel for where they came from and just relying on field photographs and I had no idea of the scale of things quite often. I mean even if there was a … a coin down on a – a sample of rock when it was photographed, it’s very difficult to get a real feel for the scale unless you’ve been there yourself, so you don’t understand the structures that you’re looking at of your photographs.

[19:28]

_When you were working on the – the rock samples and you’d – and many – many of which were Drummond Matthews’ samples, did you have his photographs of –_

Yes, yes, I did. They were the only ones I had. He’d – he’d given me negatives, or else they had – maybe they had been left with Dr Adie as part of the archive that had to be handed in at the end of anybody’s contract, and so I generated photographs, prints of those, ‘cause we had a darkroom in the – in the university department and we
all had to make our own prints from film, and in fact when I was doing my thesis, we had to take – we had to illustrate it and I took photographs of the microscope thin sections which were called photomicrographs, [laughs] and these were taken on glass plates and you – you went up into the darkroom and – and took these and then you’d develop the plates and then you made prints from those plates. So it was quite a long process and when I wrote my thesis, you always had to have four copies of the thesis and one went to the university library, one went to your internal university examiner, one went to the external and you kept one, so that was an awful lot of photographic work to have to do when you were preparing your thesis. You know, it was the same for the people doing the PhDs, but they had to do it twice over, because I think it was at the end of the first year they had to do a preliminary masters degree just to make sure that they were on the right lines, so those poor chaps [laughs] had to do four lots of photographs twice over in three years, quite a – quite an effort actually.

And among Drummond Matthews’ photographs, do you remember any in particular that were – that you used?

Oh I used a lot of them, just trying to get a feel for the … the way the different samples linked to each other and as I said, I had made a – a station map so that I could work out on the map where all these things had been collected from and then I sort of had a station map for the photographs so that I could then try and visualise how they had … where they had been collected from, particularly the – the – the landscape photographs, you know, showing the relation of several stations all that once, that was very helpful, the close-ups were not so instructive really because, you know, it was a question of scale, you didn’t know quite what you were looking at all the time. But they – they were actually invaluable to help me sort of try and create in my mind’s eye what the – the locations were like, how they related to each other.

So there’s almost two kinds of historical enquiry going on, one is the kind of – the historical geology of the area, by looking at the rock samples and analysing them and doing thin sections and working out what rocks they are, the minerals in them and how it all fits together, but the other is trying to reconstruct the history of Drummond Matthews’ field trip in order to reconstruct where he went, what he’d collected where, by using the photos and another source that you told me about yesterday Mike.
suggested that you wrote to Drummond Matthews to see if you could procure his field – personal field notebooks which he didn’t have to hand in at the end of the fieldwork and still had.

No, which he was supposed to have handed in but he hadn’t [laughs].

Ah.

Or Dr Adie claimed that he hadn’t. And these were actually – I mean they were amazing field notebooks to have because there was a sort of [clock chiming] … the sort of book where there was a carbon – a sheet of carbon paper between the lined page on which he wrote and a – a blank sheet of paper underneath, and it was a very poor copy – poor quality books with a – a hinge down the side, a bit like somebody would have taken an order for a cobblers or a grocers or something like that, they weren’t particularly durable things to have taken into the Antarctic. And there was a perforated edge so that the top copy could be torn out and he only had the carbon copy, so I suspect that Dr Adie did have the top copy, so that all the top copies had been torn out and I had to decipher these field notes from rather poor quality carbon copies, some of which had got smudged and if he hadn’t pressed hard enough with the pencil then, you know, it hadn’t [laughs] – hadn’t gone through particularly well, so there were – and I made a typescript of all these handwritten notes … because we all had to learn to type when I went to university, and didn’t have computers so nobody had been taught in school and most of the chaps were one finger typists, I went to evening class and learnt to touch-type so it was good exercise really actually to improve my skills [laughs] by going through all these hand notes deciphering the – the carbon copy handwriting and typing them up so that there was something durable and then I sent the – the carbon copies back to – to Drummond.

Why do you think that Ray Adie didn’t release the top copy – top copy if – which you suspect he may have had?

Because he never did, once he got all of these things in he just didn’t trust anybody to have them and then return them again, I think that was it, it was basically he didn’t trust people. He may well have let things out at some stage and somebody walked off
with them not, you know, forgetting to hand them in and so he thought that everybody would be the same [laughs]. And when ... when BAS left Birmingham to go to – to move to Cambridge, Mike helped pack all of the – the sample – boxes of samples up for transportation and lots of books and ... I think Dr Adie’s office was once described as a – a book lined office and in fact it was in a worse state than this room is where there were multiple racks of books with books in front of them and stacks of manuscripts and goodness knows what, I mean it was chaotic. And all that was put into boxes and taken to Cambridge but a lot of it never made it into the archives in – in BAS, it was all in his garage at home and he was going to sort it out and sort of filter through and take things in eventually. But that never happened until after her died and Charles Swithinbank and another person, Peter Clarkson, went – had the job of going through all of the [laughs] – these papers and lots of things came to light that we had wondered what had happened to and – including Nean Allman’s [ph] manuscripts for her work on this famous book on the sub-Antarctic islands which had – nothing had ever been done with it in all those years. So there was an awful lot of information that he kept close to him and he just didn’t part with it again which was a great shame.

*Did the top copy of Drummond Matthews’ field notebooks turn up?*

That I don’t know, it probably was just a – a sheaf of papers which was of no – they didn’t know the context so it probably got trashed [laughs].

*When was that – when – when was – was Charles going through this garage?*

Not so long ago ... hmmm, I think it was probably about three years ago ... yeah, I think it was – it was about that.

*[28:24]*

*And peering through the – these pages of – these smudged carbon pages of Drummond Matthews’ field notebooks, was there anything notable about – I know that he went on to work in the geophysics department at Cambridge and to become in*
that sense a geophysicists, rather than a geologist, was there any geophysical rather than geological about the way in which he was observing in the field at this time?

I think he was – it was all very much reconnaissance geology survey that everybody did in that period, so it was a question of just collecting the samples … making a note of any inclinations of structures that you could read … on the limited exposures … and … trying to get a – an identification of the rock type written down. So they were very basic, it would be, you know, station H which was the letter attached to Signy Island that’s – station – scientific station, so all the samples had the prefix H and … and then there would be one of the actual station and then .1, .2, .3 so on if you collected several samples from one place. And there would be a general description of the rock type as he saw it from the hand specimen. And any dips and strikes that he could measure on foliations that he could see and then he’d move onto the next one, so there was very little information actually of any other sort, he was not … when he was out collecting he was not thinking about the overall structural situation for the rocks because you couldn’t see from one to the other at – very often, there were quite – quite long gaps between stations because of the snow, so it would only be later when he was back on base thinking about things over the winter that maybe these are what went into the preliminary reports that he sent back to base, back to Cambridge – Birmingham at the time, our headquarters. And those were not available to me.

These were again things that Ray Adie would keep to himself?

Hmmm, hmmm.

Hmmm, and by stations are – are these places where rocks are sampled from?

Yes, yes.

So are they identified therefore on a map with a number so that you can – ?

Well that’s what I had to devise, where these stations were.
So he didn’t record them on a map?

No, no. And somebody previous had done some work on Signy Island and got a station map made up for that and I don’t know how he’d – they did it. There was a sheet that one had to fill in too which gave a description, this was a twin lock – they were called twin lock files, bit like a ring binder and there were lots of different columns and you had to fill in the station number, its lat and long if you knew it and the altitude at which the sample had been collected, a place name if you knew it or a description, say for the – the – on the ridge leading up to a sharp peak or something like that, and then the item … on the next page was a description of the rock type so I did have those station registers as they were called [clears throat] and – but it didn’t say necessarily which island it was on because he just went from – he spent a period working on Signy Island and then he went the next time to Coronation Island, and there was a very good map that the Directorate of Overseas Surveys published of Coronation Island, not such a good one of Signy Island, and they – I eventually got copies of those and as I say I had the map of Signy Island so I guess that anything that wasn’t on there must have come from Coronation Island and then with the station registers. And gradually working out the names that he had put down in this station register I worked out where things had come from and then that’s where these little sketches from his field notes came in as well, ‘cause sometimes I could relate, if he’d done a three dimensional sketch of a cliff face … and little headlands coming out of it towards where he was standing, he’d note down where he’d collected sample one and sample two and sample three, so there was a lot of sort of detective work in finding out just how – how everything came out and how he’d worked it all, you know, collected it all.

How did the sketch – how did you relate the sketch to something else that allowed you to determine where the sample had come from?

Well if it was a three dimensional sketch and you looked at the contoured map, then you could relate his sketch to what he thought that the terrain was doing and – and then you worked that out from the topographical map.
And was the chronology of the field notebook useful as well in the sense that did – the – could you – could you follow through the field notebooks from where he started to, and then the journey?

Yes.

And then the journey and –

Hmmm. Yes, and – and the station registers would be the same because you always had the – the numbering system, you know, so you started off at station one and finished up at station 200 and something or other and there would be lots of points. And depending on how – how good the actual exposure was at an outcrop, you could probably have up to ten samples from that one station and that’s where his little field map, field sketches would come in because you could, you know, he’d do a traverse so that, you know, point one would be collected at the seashore and then he would climb up the cliff and along the ridge and he’d track this down in his sketches, and he also did put photo numbers as well … sometimes, not always. So when I got the – the photographs I put on the back of those all the station numbers that were on the negative strips, well the – you know, the envelopes that they were in. So that was further evidence to help me find out where he’d been.

[35:59]

And so at this time you’re – you’re reconstructing where a male geologist has been to collect samples that you’re working on, you were hearing stories of Antarctic travel in the research – research room one –

Hmmm.

How did you feel at that stage about the fact that you didn’t have access to Antarctic?

Pretty cross [laughs]. Just wanted to get there and actually do – go over the same terrain [laughs] myself and sort of see where this person had been and get a better feel for how the different rocks related to each other. But it was difficult – well the whole
of the Antarctic is difficult to work when you’ve been used to working in this country because it’s – there are such large gaps between outcrops and places and often you cannot just walk over the snow from one outcrop to another because there’s, you know … crevasses and glaciers and goodness knows what, so that he – I think for a – quite a bit of the work he had a – a small boat that he might have gone round for the areas just north of Signy Island where the scientific station was, probably used a boat to go to some of those sea locations. But then he wouldn’t have been able to get up and on land so he’d have had to gone long way round to sort of get round and across the central part of the island which would have been difficult traversing ’cause it was snow covered peaks.

[37:47]

So to what extent did you want to go to Antarctica at this time in order to help you to understand the particular geological problem that you were working on there with the – the rock samples, so to what extent did you want to go to help you understand that particular geology of that particular place, or was it about wanting to go to Antarctica in general, wherever you went, you know, where you – just to go for the experience of going to the Antarctic? So I just want to sort of understand the relative – your relative interest in that particular geological problem, oh how annoying, I can’t go to the Antarctic to actually go and see for myself instead of trying to reconstruct it in this sort of complicated way with pictures and field notes, I want to go and actually see – see it and observe for myself.

Well – well I thought it was daft that … somebody would – should be expected to work on samples that hadn’t been collected by that person, because I had done geology because it was a – a field subject and that you needed to sort of get your hands dirty [laughs] collecting the samples and relating to the environment from which they’d been collected and to sort of almost trying to research the geology blindfolded, not having collected them for myself so I did find it very frustrating and illogical really that I should be expected to do it. And I was also cross because there was the gender issue that was sort of dawning on me really [laughs] and I thought that was stupid too, so I wanted to go for the reason of seeing it for myself, that particular location, but also going because they shouldn’t stop me [laughs] because I’m a
woman, you know, I think that was the – the start of – of feeling that it was a rather improper segregation of – of scientists, because they were male or female depended, you know, whether they could go to the Antarctic or not.

[40:02]

When did you – you said that this was dawning upon you while working on these, when did you first start to point out how you felt about this to people?

Well I probably talked about it with Mike … from quite an early stage in our relationship, I did … periodically mention it in passing to Dr Adie and in the end it became quite a joke between us, you know, that I really did want to go and he said, ‘Well you can’t,’ you know, and [laughs] – and that was it, but it – I always – I didn’t – I didn’t let it drop but I never made a great song and dance about it because at the time … it was quite clear that there was not going to be a change in the situation, and I knew this because my friend Nean, when she went to Canada, she came up again – against this whole business of really not being allowed to go down mines and she was the correspondent on a mining journal and … she wrote quite a few fairly strident articles in the journal about this and eventually she got accepted as knowing what she was talking about and you were allowed down and it was about that time that women geologists were being able to – allowed to – to join mining companies and do work for them in the field, and she had a friend who – I don’t know whether she put them up to write to the head office in London about joining British Antarctic Survey to go to the Antarctic, or whether they did it off their own bat, but she sent me a copy of the letter that they got back and it was appalling. It said that women – there were no facilities for women in the Antarctic, i.e., there was not a separate toilet, there were no shops, there were no hairdressers … and it was all the sort of stereotype of what they thought women would want to have when they were away from home, not asking them, you know, whether they would be prepared to suffer [laughs] any sort of reduction in their so-called lifestyle just to – to go and do the field science and I thought, well if they’re sending that out to all enquirers, what on earth is BAS going to look like, because it was the beginning of people wanting equal opportunities then, so I was pretty scandalised and that sort of started me wanting to have a bit more equality within my own career I suppose.
When did you see that letter, when were – when was that letter sent out from London to this Canadian?

Well it was – it was when we were still in Birmingham, it was probably the early ‘70s, late ‘60s or early ‘70s, I can’t actually remember the date but I mean Nean went to Canada in 1965, I suspect it was probably late ‘60s [clears throat] and she would have been seething when she saw it [laughs] so she would have sent it to me straightaway.

Do you know who it came from, did it have a –

Yes, it was the … the executive secretary of – of – of BAS, it was signed by him so that would be the head of administration, Bill Sloman.

Hmmm, who do you think would have drafted this letter or been involved in that?

Well I suspect he’s – he drafted it. And Sir Vivian was the director so he probably … that would have been the sort of general tenor of the discussions about women in the Antarctic, and I’m sure that Sir Vivian would not have countenanced having any women just from the general attitude, you know, it was a – a chap’s environment [laughs].

Hmmm, what – were you talking with your – or corresponding with your friend Nean about your own sort of desire to go to the Antarctic at this time?

Oh well we – I suppose we – we talked about it before she left that, you know, it wasn’t – we’d both liked to have gone and it just sort of … for me it increased as I got more and more involved with the work, geological work. And I probably did put it in letters, I can’t really remember and we – we corresponded regularly, as we do now by email. We used to send long letters to each other [laughs].

[45:23]
To what extent were you aware of and – or even involved with sort of popular feminist movements of – of the time?

I was aware of them and I … I wasn’t particularly happy because they tended to be rather strident … I think that the probably was essential, just to make people sit up and take notice, but it wasn’t a way that I wanted to behave and … I did – I did feel a bit inhibited after I got married, because if I made too many waves I felt that that might impact on Mike’s career. When we did get married it was still the situation where men went to the Antarctic for two and a half years, came back, wrote up their science and then at the end of a five year contract they would leave and most of them went to oil companies, but just about the time that Mike was finishes his PhD … there was an opportunity for a few permanent members of staff to be appointed to provide a bit of continuity, which actually was good because you had all this, you know, people working for five years on a subject and then off they’d go, and you did have overlap of a few years of people coming back and sort of spending time in the research room and swapping ideas, but then they’d go and somebody came back and they’d be working in a different area so you’d lose quite a lot of expertise that way. And Mike was amongst the first to actually get a – a – an appointment as a … a scientific officer, senior scientific officer ‘cause it must have been about the time that BAS was – became part of the Natural Environment Research Council so that’s when I became a – a scientific officer with NERC rather than a university appointment and Mike became a senior scientific officer, and so having got that sort of direct link to … a more permanent lifestyle I sort of wanted to go more and more, but I also felt inhibited in – in what I could say and do for fear of … hmmm, making problems for Mike.

Can you think of a specific examples of kinds of feminist strident behaviour that you felt was not the approach you wanted to take, so, you know, contemporary things that you were seeing and hearing that while you – while you thought it was probably necessary in order to advance the cause, you thought it was more strident than you wanted to be for various reasons, including the wish not to damage your husband’s career?
[Pause]. Hmm … I can’t think of anything specific, there was all these rather – there was an awful lot of shouting on the radio that I remember hearing by very articulate ladies … nobody within my own sphere of acquaintances that it would be what I heard on the radio or read about in the paper. I can’t remember specifics. But it … I can’t quite put my finger on it, I just didn’t want to be branded as one of them, you know, a sort of stroppy female who sort of shouted the whole time [laughs] and didn’t do anything.

[49:55]

_Could you tell me about your – your work between – at Birmingham between ’67 when you handed in your thesis on the – these rock samples that you’ve been working on and when you left in 1975, so what were you working on between those dates?_

Right, well the standard thing once you had finished your thesis was to then make a – a succinct version of it for publication as one of the BAS scientific reports, or shorter articles in the BAS bulletin, and that actually took quite a time because there’s – there’s sort of a lot of things that you have to put in a thesis that you don’t need to prove that you know about when you do a publication. So I wrote two scientific reports, one on Signy Island and one on Coronation Island and a series of smaller reports on some of the other islands which had been visited by other geologists and I also had to sort of search – do this [laughs] – the usual search through of restricted information that I had on them and their collections. And then there was … more work on this map that I mentioned yesterday that we were doing compiling for an American geologist as part of a – an international map of the Antarctic, and we had started that in ’65, ’66 I think and, oh, it was probably in … ’68 or ’69 we got a reduced version back which had to be checked against our originals and that was a fairly time-consuming job. I was then given another rock collection … from somewhere about 1,000 miles away from the rock collection [laughs] that I’d been working on before down in Palmer Land at the southern end of the Antarctic Peninsula and this again was a man who had collected them and then come back for three months and left, he didn’t want to stay and work on them, and again I had his station register and the samples but no field notes, so I got pretty frustrated all over again [laughs] of not being able to have a really good feel for what he had done. And
he was working overseas, he’d joined an oil company I think, so he was out of contact … and I spent ages going through the thin sec – getting thin sections cut and going through those and actually getting nowhere with that, I – I got very frustrated, there were other small collections that I was given to work on which were a bit more satisfying I think. And I was given … one of the research students who had done a bit of work on Signy Island on his way down to the Antarctic, when he came back he was asked to write this up and I was asked if I would oversee his work, but he hadn’t a clue what he was doing and I couldn’t really get very much out of it … myself … so it was a bit of a mess in the end, so we didn’t [laughs] continue with that too – too long.

What else did I do? And I was always helping [clock chiming] Dr Adie with his editorial work … and one of those tasks was going over to the main library at the university and checking the references of any publication that he was dealing with, he was very hot on getting the references absolutely correct … and that’s something that I [laughs] got into the way of and – and did for the rest of my career, I was always very careful of getting people’s names spelt correctly and hyphens in the right place and whatever. So I suppose that was good training but it – it meant that I spent an awful lot of time in the stacks at the library going through all these obscure papers, but not actually having time to read them, you know. Hmmm … what else did I do? I think towards the end I had very little to do … and Dr Adie did travel quite a lot on business and he would go off to the Antarctic every other year on a duty tour and without access to all of the information [laughs] that was locked in his office, if he hadn’t given you anything because you hadn’t been out – able to go and collect stuff yourself you had to sort of await whatever he handed out, which was a ridiculous situation and in the end I felt it was wrong to be sitting doing nothing in particular and being paid for it, so I resigned in – in 1975. And it was a – it was sort of brought to a head because I was – I was a senior scientific officer by then and – but not on a – on a permanent basis, your contract was renewed every three years of something like that and you weren’t receiving a pension, you only received a pension if you were in an what they called an established post, which meant an open-ended permanent appointment, and in 1975, in February I think I received a letter from … NERC establishment saying – offering me a permanent position with BAS. Dr Adie was in the Antarctic, Mike was in the Antarctic and Charles Swithinbank was in the Antarctic, because by then he had taken over as head of earth sciences because when Sir Vivian Fuchs retired in 1973 Dr Laws was appointed as the new director and there
was a redefining of the different groups within the survey and geology and glaciology and geophysical came under a new division of earth sciences, with Charles Swithinbank as the head and Dr Adie became deputy director of the British Antarctic Survey. So I was sort of morphing into coming under the charge of Charles, but still working with Dr Adie at the time and I felt that this was a … it was – I would liked to have been able [laughs] to discuss it with all three of them but I had to make a decision whilst they were all away and I just didn’t feel that I was getting anywhere with a career. I was a senior scientific officer but I didn’t really have any responsibilities and no way of getting to the Antarctic to do my own research. So I resigned and … I wasn’t very popular when they all came back [laughs]. I mean Mike understood my dilemma but Charles was very concerned and he came and stayed with us in – in Birmingham to discuss the situation and he asked me if I would – if I had the opportunity to go to the Antarctic would I stay and I said, ‘Yes,’ and then the – the board of senior staff at BAS obviously had a – a meeting and then the director phoned me and he said there was no way that they could change the situation at the time and women would still be excluded from the Antarctic, even though – and this was 1975 so there was equal opportunities coming in, but because it was beyond the … territorial limits of the – the UK they could still operate the system as they had it at the time, well that was my understanding of it anyway. So I continued with my resignation and I left in – in May of 1975. Another factor with this resignation was that we already knew that BAS would be leaving Birmingham and a new building was being constructed for it in Cambridge and that … geology obviously was going to be moving there, but that I was probably going to be moved into the administrative division because there wasn’t a role for me in the geology research group and I definitely didn’t want to be an admin person [laughs], I wanted to remain on the science groups and – and do geology and – and mapping, so it sort of – that was all part of the – the reason for – for leaving. And so I left and couldn’t find any other work in Birmingham for a geologist ‘cause there was nothing in the department, so I stayed at – at home and did a bit of voluntary work for the Royal National Institute for the Blind, reading textbooks for them on geography and geology, which I always thought was rather strange that blind people would [laughs] study because it’s such – both are very visual subjects but … they nevertheless did have students who – who wanted to have the textbooks described to them. So that was quite a good challenge,
kept me occupied. And then within a year we’d – we’d moved to Cambridge and we’d bought a dilapidated house that needed some loving care spent on it …

[1:01:33]

I need to backtrack a bit actually because in 1970 Mike and I were allowed to – well several members of the BAS geology group were allowed to attend a – an Antarctic geology conference in Oslo, the Scientific Committee on Antarctic Research held periodically conferences on various scientific disciplines, and they were held in different parts of the world and geology was usually every five or seven years or something like that and this was the one that, I think it was the second one they’d held that we went to and we got to meet geologists from all around the world who were working in the Antarctic, it was a tremendous experience, we’d known the names from, you know, the literature that we’d been reading. We went on a – a three day excursion around southern Oslo, field excursion with a bus load of all these Antarctic chaps and made lots of good friends who we bumped up – bumped into on – on many occasions over the – the years and worked with in the Antarctic too, so that was an introduction to a lot of people who became quite prominent in our careers in – in later life. And one of those was a – a Scottish man, Ian Dalziel who had gone out to America and he was working at Lamont-Doherty University in – in New York State and he … was a bit like Drummond Matthews, he was very interested in the overview of the structural environment, the tectonic environment of the Antarctic and … he had got interested in the South Orkney islands as being a key to some of the developments of … the – the tectonic environment and the southern hemisphere really. And he had spoken to us in – in Oslo and knew what we were both working on, Mike is a palaeontologist so he’s – works on – on fossils and I was sort of doing this petrology of the South Orkney islands, and over the years he got increasingly interested in attending or organising an expedition to the – the South Orkney islands himself and he went – I think the Americans started to take women in the 1970 – in 1970 to the McMurdo station and he was operating with a little research vessel called Hero doing landings on islands, and he’d taken a married couple with him on the first trip to the South Orkneys and he felt that he needed somebody who knew a bit about the geology of the South Orkneys so he invited me to go along. But that invitation came just as I – after I had left BAS and he – well he was talking about it in – in late ’75
early ’76 and he said would I be interested and would Mike be able to come as well, so Mike had to get permission from his director for release for him to go on this expedition and of course by then I didn’t need to ask anybody because I was not employed [laughs] and so I – I said, ‘Yes, of course I’d like to go,’ [laughs] and they I think paid my airfare … and that was a good … a good way of sort of getting into the Antarctic fraternity from that – that one conference and it led to a whole range of things in – in the future. And I don’t want – do you want to take those in sort of chronological order [laughs]?

Yes. I’ll just pick up on a few things leading up to this and then I’d like to talk about this 1977 cruise, yes.

[1:06:46]

The first thing I was wondering is Charles – the visit of Charles to you in Birmingham when he said, ‘If you were able to go to the Antarctic would that make you stay and accept this permanent contract rather than retiring,’ and you said it would what – and he went back to the board, well how did Charles know that you were not content about your position in Birmingham, using other people’s samples and so on, not being able to go, how did he know to come across and ask that question?

Well I think when he took over as being head of earth sciences he came – made several trips across to Birmingham from Cambridge where he was based at the time … to – to talk to all members of staff, getting to know them, and so he had spent quite some time I think talking to me in my office on those early trips so he knew from those visits that I was not happy about lack of work that I was being given and – and that I wanted to – to do real Antarctic research [laughs] by going to the Antarctic and collecting the samples myself, so I think it was over several conversations that, you know, he knew my feelings about it and it was just unfortunate that when the decision was made to make me permanent that the letter arrived when they were all overseas and I couldn’t discuss it further with them at the time and had to make a decision before they got home.
What did Charles – in those initial conversations in Birmingham, what was Charles saying to you about your frustrations?

Well he was very sympathetic and having working in America where there was a very different attitude to … the – the gender situation he couldn’t understand really why there was still a continuing resistance to women working in the Antarctic with the UK arrangement. So he was very supportive and … I think that, you know, that was very helpful actually [laughs], it made me feel a lot better that somebody wasn’t just dismissing the idea out of hand, that he was willing to take it up with his male – senior male colleagues.

Hmmm. And so he went back to the board and they discussed it and then there was a phone call?

Yes.

From?

The director did have the … presence of mind to actually speak to me himself, that was Dr Laws.

So Dick Laws phoned you and did you remember what he said?

Not really, I know I was pretty upset at the time but in those days one didn’t have an office telephone, external telephone calls had to be taken in a little cubicle up along in the corridor so you would receive an internal call to say there was an external call for you [laughs] and you had to go into this stuffy little cubicle which was in a sort of public concourse area. And so I was stuck in it and – and Dr Laws just said that the matter had been discussed that I wished to go to the Antarctic but that the situation could not be changed at the time and therefore they were going to accept my resignation, so it – the resignation had been put on hold, you know, during these discussions. And I guess they had contact – the admin people in BAS had contacted NERC to say, you know, ‘We don’t want this to happen, we’re negotiating,’ but I don’t really know. And I think from that time on Dick Laws rather regarded me as
one of these stroppy individuals – females who, you know, because they couldn’t get their own way were not going to sort of kowtow and I didn’t really have much to do with him when I rejoined BAS, I had a few run-ins over things that Charles and I had forgotten to tell him that we were doing but he was fairly remote, and it was only after we had retired and moved up here, he came and stayed with us with his wife overnight and he found I was perfectly normal [laughs], that I wasn’t the – the stroppy person that he – he had always had this image of, so that was quite amusing actually [laughs], although I’d tried my best not to appear a stroppy individual obviously I had come across in some situations to the older generation of men.

[1:12:05]

Can you think of – apart from this early wish to go and bringing about this board meeting, can you think of other things that you said or did that would have given him that impression you think over the years that – ?

… I think there was another occasion actually when he had come to meet the new staff and I had wanted to speak to him about the situation with Dr Adie not giving me enough information to be able to have a satisfying workload, and he had been going to come round to people in their offices but he’d taken so long discussing things with Dr Adie that he – he asked the staff to sort of assemble in one of the research rooms, and I obviously was fairly agitated by that stage because I got this phone call to say would I join the rest of them in the research room so I went off to the [laughs] main library in high dudgeon and lurked in there for the rest of the afternoon [laughs] so I never saw him ‘cause I was so cross I don’t think I could have said anything in public, you know, I didn’t wish to discuss this sort of personal thing in a – with a group of men listening in. If it had been a one to one conversation I could have said it much better.

Were you expecting that it’d be an opportunity for a one to one conversation?

Hmmm, yes.

That’s what you’d been sort of promised then?
Yes, yes.

And what were you going to say?

That I wanted to have better access to material if I was expected to do research on rock samples, rock collections and that I wanted to be able to do my own fieldwork, because I didn’t see any career possibility within the setup of BAS at the time, of getting into any senior managerial roles without having had that experience.

Thank you.

[1:14:19]

So you retired and where were you living in Birmingham at this time, presumably in the house that you moved into after your marriage?

We had a flat, we … we had a – a flat in a – a top floor of a semi-detached house the first year and then we moved into a non-furnished flat that was owned by the university in a lovely Georgian house in Edgbaston which was just about a mile and a half from the university, so we used to walk to work through leafy suburbs of Edgbaston, it’s a very pleasant place to live. [Clears throat]. And we lived there for eight years and slowly accumulated a fair amount of furniture and they were very large rooms with probably twelve foot ceilings so that we didn’t really feel we had very much furniture, but when we moved to the Cambridge area into a little house [laughs] we found our furniture rather overfilled the house [laughs], it was only a two roomed flat that we had with a little kitchen and a – a bathroom, but yes, it was a very pleasant place to live.

[1:15:35]

And in the period when you were both working at the – in the Birmingham department and living in the – the – well whichever of the two flats –

The flats, hmmm.
You were living in after – after your marriage, how was the sort of domestic work divided up in the case of your marriage?

[Laughs] I did most of it, I mean Mike has always helped with the washing up and the … he’s in – he enjoys cooking ‘cause of course he had to cook when he was on base for twelve other people, but tends to be a bit of a messy cooker so I tend – I did the – the cooking, we usually went out shopping together on a – a Saturday morning when we weren’t expected to work, otherwise it was Saturday afternoon. But at some stage during that period … we – I think some of the lads made a deputation to Dr Adie that they didn’t want to have to continue working in Saturday mornings and one month – one Saturday a month off was not very much … and especially for us it was – it was difficult when we were married because my mother lived in Reading, Mike’s parents lived in London and we had to alternate family visits to keep in touch with the family and – and you know, you were sort of dividing your time between parents and not really having the opportunity to do very much at weekends, apart from going out for walks on a – a Sunday somewhere. So yes, we did the shopping together and … I’m not quite sure what Mike often – Mike does a lot of reading like me and if there were any DIY jobs to be done he was very good at doing those, but basically the – the housework was me.

[1:17:43]

And what was your relationship with your mother at this stage?

… Hmmm, how do you mean?

Well … I suppose how did you – I suppose I mean how did you get on together when you saw each other?

Oh well we always got on very well … I think, I mean she was very fond of me but she wasn’t a very demonstrative lady and … I think she regretted that we didn’t have a telephone, my sister was very talkative and they would talk non-stop on the telephone, I would have to go up the road to a telephone box to phone home and I
don’t actually like using telephones, I’ve always disliked them and I still do, so I avoid it and I sort of psyche myself up to make conversations [laughs], with people particularly I don’t know. So I hardly ever telephoned her except on birthdays and Mothers Day and things like that. But we wrote regularly and – and one of the things I remember when I was at university she used to cut flowers from the – the garden at home and send them to me by post and I’d get them the next day, and you wouldn’t have that [both laugh] – have that happen now, you know, they’d – they’d sort of deteriorate in the post or – so she was always trying to sort of tell me … what was going on at home and sending little packages of vegetables because we didn’t have a – our own garden in the flat, it was a shared garden and it was just lawn and a huge tree, and if she made marmalade we’d get little pots of – and that sort of thing, and she’d knit things for me and crochet things for me as she did for my sister and well all of the – the grandchildren that she had, because my brother had three children and my sister had two children, she regretted that we didn’t have any children, always dropping hints [laughs]. And when my – my uncle that she lived with, he retired in 1969 and they had lived in a – a house in Purley which had a large garden and they sold off part of the garden and it was developed and another house was built on it, but the garden was still too large for my uncle’s – he wasn’t interested in gardening at all, it had had a large orchard and that’s what was sold off, and he’d always been keen on sailing, he’d always had a boat and they decided that they would move to somewhere where there was a – a marina that he could have his boat on and be handy, so they moved to South Devon which was a long way from us in Birmingham and my sister was in the Cotswolds and my brother was near St Albans so she was very isolated from the family, actually, after that move. And it meant that we couldn’t just pop down for a weekend, that if we wanted to see her that was part of our holiday, that we had three week’s holiday a year including Bank Holidays I think and part of that had to be taken when the university was closed, it had a week – I think it was at the end of August that it closed, the entire campus closed and again a week at Christmas, so you really had to take your other week added onto one of those two weeks if you wanted a – a fortnight. So we tended to – to visit my mother then because Mike’s parents were still in London at the time and we could keep up with them at weekends. So I think, you know, we continued a good relationship with my mother.
You mentioned that she was dropping hints to you about having children, what – did you discuss with Mike the – the prospect of having children or that possibility or how –

I didn’t want to have a family whilst we were living in a – a flat and I didn’t think – I mean I would have – I suppose that was memories of those few weeks we had living in a – a single room as a child and how inhibiting I found it, even for that short period [laughs], and I didn’t think it was what I wanted to do to bring up a family living in a flat. Of course by the time we got our own – our own house we were – we’d been married a long time and we sort of were thinking … didn’t really, you know, we were happy as we were and I also had the prospect of going to the Antarctic so that was … not going to make it very easy, you know, if I had a – a family.

Hmmm, I see, thank you.

[1:23:19]

The – you retired then and you – you’ve mentioned some voluntary work for the National Institute for the Blind?

Hmmm.

So this – you resigned in 1975 and you went on this geological cruise in 1977, so how – have we a full picture of your activities over those two years then?

Well it was May ’75 [clock chiming] when I resigned and we moved to Cambridge in May 1976, so we … sort of a few months before the move we were busy sort of – well we’d been searching for a house for a year and the survey had actually moved across in April and … when was it, I think we saw the house in February ’76 and it was the last possible date when we were likely to be able to make a – a transaction that would be finalised in time for us to move about the time that BAS moved, so in fact Mike had to spend a month over in Cambridge before we did the house move, we were sort of living on somebody’s floor, sleeping somebody’s [laughs] floor in the – in the meantime.
And where was the house in Cambridge?

It was in a small village to the north west of Cambridge, Boxworth.

And can you say a little bit about why that house was chosen as opposed to others you looked at?

It was the cheapest [laughs]. And it was the only one that we thought that we could do … where we could be happy there. We had – and it was quite a – a difficult time finding somewhere, because we didn’t have a car, so we had to catch a train from Birmingham to Cambridge and that was a four hour train journey and then you had to find a local bus to go out to the village where there was a – a property that we’d had particulars from – of, and then you would have a look at the property and then you would have to wait for the next bus back to Cambridge and then you had to catch the train back to Birmingham that night about four o’clock, so it was a very long day and we probably only had time to see one or two places. Because we didn’t want to live in Cambridge, we wanted to be out in the countryside, since I had grown up in the country I wanted to be back in the country and living in – in London as a student and then had twelve years in – in Birmingham, the centre of Birmingham, I didn’t want to be in the centre of Cambridge.

At this time did you know that you were going to have this option to go with the Americans on the cruise?

It had just started, yes, it was the beginning of ’76 that Ian Dalziel had corresponded with us, so – and we knew that it – if it had – if it came off it would be ’76, ’77 when we – we went on the cruise, so we left the UK on Boxing Day in ’76 for the start of the cruise in January ’77.
Ian Dalziel, had he been educated in England, in Britain?

He was the Scottish man from Edinburgh University.

And he’d – you’d met him at the Oslo Conference?

At the Oslo conference, yes.

Why did he ask both of you to go on the trip as a married couple, rather than asking you?

Well there was the potential for some fossil finds and he knew Mike was an expert on – on fossils and I – I think possibly he thought that I would be more inclined to go if Mike was with me. I don’t know whether that was the situation or whether he just felt that it was better to have married couples because he’d had a married couple before working on the – the Hero, ‘cause it’s a very small ship and it only had three cabins for the scientists, so you’d have to double up with somebody. So if there’s only one female it’s better if the female [laughs] doubles up with their partner rather than a stranger.

But he didn’t say that that was why?

No, no.

Okay, thank you. Now you – you suspect that he thought that you’d be more inclined to go if you were invited as part of a married couple, was that the case, were you more inclined to go because you’d been invited as a married couple or would you have –?

Yes I think I was at that stage, I was still very shy and … as it turned out I knew – well I knew Ian and the other person on this cruise was a man called David Elliott who had been the first FID that I’d ever met at Birmingham and he had left in 1966 to take up – at the end of his five year contract to take up a post at the Institute of Polar Studies in Columbus Ohio at the state university there, he ultimately became director
and our paths have crossed quite a few times since, he’s still a – a good friend. But he knew Ian because of being on the American circuit, Ian Dalziel and they had written some science papers together, so he was a – an obvious candidate to join us on that cruise.

*So just the four of you on this cruise?*

There were six actually. There were five Brits [laughs] and one American. The other British man was a – a student of David Elliott’s I think, he was doing a PhD at the Institute of Polar Studies and his name was Neil Wells and I think he was a nephew of one of the famous petrology textbook authors, there’s a book on sedimentary petrology and another one igneous petrology and it was Hatch, Wells and Wells so it was quite interesting to meet this nephew of that, so he was the other Brit but he had been living in America since he was a child. And then true blown American was a – a guy called Bill Zinsmeister and he was another palaeontologist, but with a different sphere of expertise than Mike.

*So the – it was an American geological cruise or field party –*

Hmmm.

*But a rather British make up in some [inaud] –*

It was yes, and though we were the only two from the UK, residents in the UK, the other three hadn’t – were – were British – American citizens.

*Yes.*

[1:30:48]

*Could you tell me more about the aims of that geological cruise, bearing in mind again that the listener may not have any geology at all?*
Right, the – the original reconnaissance surveys that Drummond Matthews and other BAS scientists had done had concentrated on any islands and outcrops that were accessible from the Signy scientific research station and there was a long northern coast that you couldn’t really access over land, it had to be approached by ship and then landings made using a – an inflatable dinghy, so that was one of the aims to visit all those locations in the island group that hadn’t been accessible from over land transport and to try and fit it into the … sort of the … the overall structural evolution of the … Antarctic Peninsula and the islands known as the South Shetland islands, the South Orkney’s, the South Sandwich islands, South Georgia, the Falkland Islands and how they all connected in with South America, where Ian Dalziel had also done quite a lot of work, and this whole group of islands is known as the Scotia Arc and the Scotia Sea lies between the Antarctic Peninsula and Southern South American, Tierra del Fuego, and then there’s a great swirl eastwards of islands and this is where a – we get into tectonic plates and the Scotia plate and there’s an Antarctic plate and the – I’m a little bit out of my depth here ‘cause I can’t remember all the names [laughs] now but it’s – it’s how American – South America and the Antarctic separated with the – the moving … of the plates apart from each other and the evolution of these islands. And the South Orkney islands is on the southern ridge of this Scotia Arc and so Ian was very interested to see how the rocks had been deformed during this movement of the plates and to find out any evidence for the age of the – the rocks, because they had been folded and pressured and metamorphosed, there was hardly any evidence for the age – for their original age of the – the sediments that they had been. There were a series of dykes, these are … igneous rocks that have been pushed up through the existing metamorphosed rocks on their way to becoming lavas and – and volcanoes but they never actually made it to the surface at the time, so they solidified beneath the ground. These cut across all the structures within the metamorphic rocks and they can be dated by radio [pause] [laughs] –

*Radiometric* is it?

That – thank you [both laugh] – evidence, but unfortunately a lot of the dykes were heavily altered from subsequent processes so we weren’t particularly sure that they’d got a – a good age, a – a reliable age from these rocks that had been dated previously, so he wanted to collect fresh samples and to have a look at the – the structures that
were – he thought should be evident. And so that was the main thrust of it and to also visit any islands that had never been visited before because there were lots of tiny little islands, and the – there was a group of – the island to the east of Coronation Island, which is the biggest island in the group called Powell Island, had had some fossil plant samples collected from it and he wanted to see if there were any others that could be found and if there were any significant animal fossils as well, and then there was another island further east, to the south of Laurie Island called Graptolite Island which had been visited by a whaling ship in the early 20th Century and it was claimed that graptolites had been found on this island. Now graptolites are those funny … pencil-like structures that I had seen when I was doing my first geo field trip to the Pentland Hills in Scotland and they are on very old rocks and so there was nothing like it had been found elsewhere in the Antarctic at the time so there was some doubt as to whether these really were graptolites, so we wanted to go and look at that as well. And that’s quite a little story in itself but anyway that – it was really doing a reconnaissance – well filling in the original reconnaissance survey and trying to visit as many places that hadn’t been visited before, but also revisiting some of the sort of classic localities to get a feel for what the … the – the main rocks were like, so we did a lot of landings over a – a six week period and Mike and David and Neil and Bill were put off on Powell Island to work there and look at the sedimentology because there were younger rocks that hadn’t been metamorphosed, had been laid down afterwards, have a look at those whilst Ian and I stayed on the Hero and we did daily journeys around in the ship and went ashore on – on the inflatable and covered quite a bit of area but unfortunately every time we headed off to the north coast to visit these places that had hardly been visited at all, there was a big swell and that was the north side of the island group onto the Scotia Sea, so if there was a – if there’d been a storm then the swell took a long time to die back down so it was – we’d go round there and often there was just too much swell to enable us to be put ashore, which was very frustrating ‘cause there were bits that we never actually got to that we wanted to get to. There was an occasion on the south coast, I think it was, when – no maybe it was the north coast where there was a big swell and I … was following Ian ashore and there were a lot of … little bits of ice clinking around and we had a – a Chilean boatman who was a bit nervous about this and he wanted to get back out to sea and he didn’t rev the engine quite enough to keep the prow of the boat into the … the – against the rocks that we were scrambling out on so the boat suddenly dropped
away as I was about to step out [laughs] and I stepped daintily into the sea instead
[both laugh] and went right under, and of course the boat then came up behind me so
it could have been a nasty situation, but we always had to have life jackets on, so I
bobbed straight back up again and Ian had seen what had happened and grabbed hold
of my hand and I – the swell took me up right onto the – the shelf that we were
stepping out onto and I stood there draining sea water and I … was prepared to do the
notes but he obviously found that I wasn’t quite up to – I was still a bit shaken by
[laughs] it all and he – he said, ‘I think you better go back to the ship and get into
some dry clothes and then the boat can come back for me,’ so I was a bit cross that I
couldn’t do that but I guess it was delayed shock really, I was sort of feeling all the
cold water suddenly seeping into all my clothes [laughs] and Ian radioed Mike that I’d
had this accident and I was quite all right, just a bit wet [laughs], so when Mike came
back onboard he sort of … he said, ‘What happened to the camera?’ [both laugh]
‘cause I got his favourite Voightlander camera which had little bellows and I’m afraid
it never worked again after that [both laugh]. So that was one exciting episode, but it
did mean that I think Ian was a little bit more circumspect after that about dashing
ashore when there was such a heavy swell. So we did – we did a lot of – of work
there, Mike and his party didn’t find any new fossils so that was a bit frustrating for
Mike, you know, he – I mean he did a lot of the sedimentology work with the others
but never quite found the – the fossils that he was hoping to find to help date the
rocks. And then we moved round to have a look at this Graptolite Island and it was a
very small island, low, probably about a couple of metres above sea level and the ship
moored a short distance away and we got into the boat – boat to come ashore and it
was sleetig horizontally, it was not a very nice day and we had all our waterproofs
on of course, whenever you went into a dinghy you had to put them all on, and we got
ashore – ashore and found that it was a penguin colony, absolutely covered in guano
and penguin nests.

What’s guano?

The droppings of penguins, so it’s this sort of pink sludge over everything and to
climb up there was only a two metre cliff but you had to climb on that to get onto the
top of this island, so you got covered in guano just trying to get up and it was sleetig
so everything was wet, and when we got onto the top there was – you couldn’t see the
rock for the guano so – and it was like the Pentland Hills it was hardly the right place and the time [laughs] to be looking for graptolites but I mean we did knock off samples and the fresh surface it was just no way that there were ever graptolites there, so I don’t know why this sort of collection had – had taken such prominence and – and whether it was a – a spurious sample that had been collected from somewhere and got mixed up with the – the original whaling collection, I don’t know.

Why was it obvious that there could not have been these little feeble fossil?

Well it was all metamorphosed rocks and there was … it was just not the right sort of rock for them to be found in. And then – so we somewhat disconsolately went back to the ship and we were not allowed to go into the … the cabins until we’d taken all our clothes off because they smelt so strongly and [laughs] even at the end of the – the voyage some – some weeks later, you know, you could still smell the – the guano once it had dried, you know, we’d tried to wash it off and it was really pretty disgusting stuff.

[1:44:39]

You mentioned Mike’s attempts to find fossils in order to date the rocks, were there people taking the – the other measurement of age which we just mentioned –

The radiometric, yes.

Yes. And if the work – could you explain what that involved?

The – we – Ian and I were collecting – finding more dykes and collecting them, you always have to look for the – the fresh samples from the middle of the dyke – the dykes are often about a metre wide and therefore if you can knock a sample off from the – the centre of the dyke you – you will get a – a real sample of rock rather than anything that has interacted with the – the other – the host rock that the dyke has pushed through and you get alternation then where the – the edges of the dykes are, and that’s what interferes with the radiometric dating because the age of the dyke can be reset by this alteration process. So we were trying to find good wide dykes but
many of them were perhaps six inches wide or something like that and there’s no way you could find a – a good fresh sample from those. Dykes tend to weather differently from – to erode differently from the – the surrounding rocks that they’ve been intruded into and so they often stand proud, so if you can find a nice wide dyke it would be standing proud of the rock and you had better hope of getting a – a clean sample from the middle of it.

*Is – is imagining a dyke in – you know, the – like a dyke in the fens is that – would that be a very misleading way to think about these?*

Well I think that the – the name dyke is because often – because they do weather differentially from the host rock certainly where the dykes are found at sea level, you often find that they are – they have been eroded rather more rapidly than the surrounding rocks and so you get these long straight depressions in the seashore so that they look a bit like the fen dykes. But then there can be, you know, occasions where they’ve been intruded into soft rock and therefore they stand up like a wall instead of being a depression.

[1:47:22]

And so the – the samples are taken back to a – a specialist laboratory and they’re analysed for the decay of radioactive minerals in – in the … the igneous rocks.

*Where – where was this laboratory?*

I suspect that that was in Lamont-Doherty University, I’m not sure, I can’t remember, there – there was one in this country that Dr Adie had used and that was at Leeds University at the time, it was a potassium argon dating system but then there’s another … way that the rocks are dated using the decay of rubidium-strontium ratios in elements, in – in minerals, and that was subsequently done at the British Geological Survey near Nottingham.

[1:48:26]
At Leeds who was running that section – laboratory I suppose?

Hmmm … there was a man called David Rex who did the work for Dr Adie but I don’t know who was actually running it … and I don’t – I can’t recall the name of the – the man who did the work for Ian in the – the States.

[1:48:56]

You’ve used -

But we didn’t – we didn’t get particularly good results anyway, not particularly reliable.

Why – how – how were you able to know that they were not reliable?

I think because there was a wide scatter of age – ages that came out so, you know, there was no one focus of – of ages.

Do you know – do you know what the output looked like from this technique?

It usually came out as a graph, you know, you’d plot the results of the – the ratios and they’d be on a – a line but if that – if the points were scattered too widely, you know, you’d – you’d draw a line joining two points [laughs] and if all the other points were a long way away from it it didn’t really give you a – a conclusive result.

And you were looking for an age really, yeah?

Hmmm.

Okay thank you.

[1:49:48]

A couple of times you’ve mentioned the phrase to knock off a sample.
Hmmm.

Could you describe how [both laugh] – what that involved?

Brute force [laughs].

So you – you –

You use a hammer, a particular geological hammer which has a flat end one end and a chisel end at the opposite end of the head, students usually are issued with one lb hammers … and the normal hammer for a – a petrologist is either two lbs or four lb weight, and then collecting samples from radiometric dating you usually had a sledgehammer, seven lb sledgehammer around which has a long shaft so it’s not so easy to carry around but the two lb or a four lb hammer is not too difficult.

Why did you need a larger heavier hammer in order to take –

To get a bigger sample.

Why did it require a bigger sample for that?

Because then if you – you would get more chance of getting a fresher surface to crush up for the analysis.

So when you were taking a normal sample with the two lb or four lb standard geological hammer, you walk up to the – the sort of exposed area of rock that you want to take a sample from and just hit it do you or is there something more to it than that?

[Laughs] Well you’d try and find an edge which you think will spall off so that you will get a reasonable piece of, you know, fist sized sample, the bigger sample you can collect the better actually because certainly with metamorphic rocks where there’s a lot of layering of minerals within them, you can get concentrations of garnet in – in
one layer and – and hornblend which is a sort of greenish back mineral in another. So if you only took a sort of fist sized sample you might get, you know, all garnet and it wouldn’t be representative of the – the true rock, so with schists and gneisses which are the metamorphic rocks, the schists tend to be flaky rocks with a – a sheen, a sort of leaden sheen on them because of all the little flakes of mica and – that are in there. If they’re a greenish sheen then they’ve got a mineral called chlorite in them which is an alteration of the mica. And those are fairly soft to – you can just sort of hit them with a hammer and they’ll just to a – a mush really so you have to find a protruding section with a weakness along it that will allow you to get a – hand sized sample off it. And they were also [clears throat] – they were folded on a very small scale, so you had little ripples like you see ripples in the seashore, and this was due to the pressure so if you could get a – a good feel for the – whether it was symmetric or asymmetric folding you wanted to be able to describe that and have a sample of it back in the laboratory, so I tended to try and get bigger samples than small ones. And also if you want to do geochemical analyses of the samples when you get back home you’ve got to have enough that you can crush some up for doing a geochemical analysis, you’ve got enough to make a thin section and you still have a reasonable hand sample left to just look at and sort of record what it looked like.

*What do you put the – this sized samples into once you’ve taken them?*

Hessian sacks supplied by … the Americans or linen sacks or something like – or potato sacks [both laugh], you know, small potato sacks and then you’d put a number in a felt tip pen [clock chiming] on the sack because … [laughs] … because when you get back to the laboratory you have to put the – the number – you paint a white strip on the sample and then with a – a mapping pen and Indian ink you put the actual number on the sample so that that’s a permanent way of – of identifying that sample. Sometimes in the early days they used to have string and a cardboard label and they would label – put the number on the label, tie that onto the string and then do a little parcel around the actual sample, but of course the string could be worn by friction as you were walking around with them in your ruck – rucksack so sometimes the labels got separated from the [laughs] – the sample and that’s where mix-ups happen.

[1:55:12]
And then what did you do in order to ensure that when you got back to the laboratory, the number on the rock made sense, in other words you could say, ah that’s not – that rock sample is number fifteen, how could – what had you done in order to remind yourself where that came from?

We have standard little field notebooks which are hard back books with about postcard sized pages, six by four inches [clears throat] and you write in pencil and you have the date – the day and the date at the head of the – the page and then if you’ve got a – a location name like Amphibolites Point, one of the place names for the island and which island you were on, you’d put that and then you’d have station one, station two, station three and you wouldn’t actually allocate true station numbers until the end of the … the field period, you know, it would be decided who’s had which station numbers. So it was done on a fairly methodical basis but you could always relate to that to your field notes and you would write up this station register that I mentioned before at each day or at the end of a week or something like that.

Would you have latitude longitude in order to map these – the position of these stations later?

We – we had this reasonable map that we were using, you know, the Directorate of Overseas Surveys map of Coronation Island and that also included Powell Island and Nicholson Island, so we had sufficient basis on which to record where we had been and work out where we had been [laughs] you know, when we got back onto the ship from the little landings that we had made so we would make sure that we knew where we’d been and I had been taking photographs until I lost the camera in the sea [laughs] but Ian continued to take photographs. You do have a compass with you so you take bearings, I don’t think we … we didn’t have GPS at that time so we didn’t have a way of actually finding out exactly where we were with a simple device like that [clears throat], so it would have been bearing the sample – compass bearings on known peaks and working out where we were from that.

[End of Track 5]
Could I ask you to describe the – the voyage down to Antarctica for the 1977 geological cruise, including your first sighting of – of Antarctica, or at least the first time you thought that you were looking at Antarctic proper, given that this was your first time there, I feel we ought to have your – a description of the – of you meeting the Antarctic.

The impact, yes. The Hero – the American little research vessel, it was a – quite a small ship, more like a trawler actually, it was about 125 feet long, and it had a mizzen mast to boost its output so at maximum I think it could do about eight knots. It had – it was on its way back from a previous cruise ‘cause the Americans used to fully use it as – during the summer season, so we were due to meet it … in … either very end of December ’76 or beginning of January, so Mike and I had arranged to fly out on Boxing Day in 1976 to Buenos Aires via Madrid and we would meet the rest of the party there and then join the ship. Because we were staying with Mike’s parents who lived in Ealing for Christmas so that we would have access – easy access to Heathrow we were away – away from any contact with our American leader and he had heard just before Christmas that the Hero had dropped a – a steel sheet from its bow when it bumped into an iceberg during rough seas on its way back to South America, so she was delayed by a week setting out and had to be repaired at one of the naval bases in Argentina, so we were stuck in … Buenos Aires for a week by ourselves, which was very nice because Mike knew Buenos Aires from his previous trips of joining BAS ships and flying there to – to join a BAS ship, so he was able to show me around Buenos Aires and we experienced New Year with – a South American way of celebrating was to throw out all the account books from the offices so that when you walked around the streets on New Years Day there would all be these [laughs] invoices and receipts and things piled up in the – on the streets, it was quite an amazing system, so they must have had some pretty riotous parties to do that with. Eventually everybody came out and then we went down to Rio … no … hmmm, Bahia Blanca and … the ship was at Puerto Belgrano which was the naval base and we had all the difficulties of actually being non-Argentine citizens gaining access to a – an Argentine naval establishment to join the ship, so there was a bit of kafuffle in getting all our – our gear in. And then we eventually set sail, some time
towards the end of the first week in January 1977, and I’d always thought I was a good sailor from messing about in boats and doing crossings on ferries and things but as soon as this little vessel hit the high seas I realised I didn’t [laughs] sail very well, so I didn’t see very much of the – the sea ‘cause I was horizontal in my cabin for much of the – the journey and was only sort of roused to become vertical when Mike said we were approaching South Orkney islands and there was these sort of little distant humps on the – the horizon rising and falling behind the swirl with the – the ship as it went up and down, so I wasn’t in a particularly good physical state to appreciate my first sighting of the – the islands. We … eventually anchored off Signy Island which is where the British have a – their scientific station and I began to get a – a feel for … the sort of general topography, but I don’t think it was actually until I made a real landing on Coronation Island where we did most of our work that the true impact of the height of the cliffs and the – the peaks that I had been looking at on photographs really sort of – I began to appreciate it because, you know, a small three by three inch photograph is not going to give you very much feel for the – the detail and the scale of things, so I was a bit overawed by the – the height of the – the cliffs and the – the mountains and it was – and the amount of snow and ice, although I’d seen again those on photographs it still – when you see it for real you realise the difficulty in – in working around in that terrain that all these men had been trying to – to do a reconnaissance survey when it was very difficult and … it was … yes, it was a sort of – a wonderful thing to be there and to be part of it. I think the first actual landing was on quite a low lying little headland and we were looking at the rocks and the snow came down quite close by and I heard a – a crunch in the – the snow behind me and I turned round sort of thinking, well there’s only two of us here and there were three little penguins that had come to investigate us and they were very curious, and they stayed on the snow and just sort of bobbing their heads from side to side trying to work out what these big penguins were like [laughs] but they were so trusting, you know, that was my first interaction with the penguins and the – the wildlife in general there; they’re just so unused to humans that they don’t realise there’s a danger there, or potential danger, so they stood and looked at us and I stood and looked at them [laughs], that was – that was lovely being able to be so close to them. Although later when you have to walk through a rookery to get to the – the outcrops it’s a bit changed because they – the rookeries are just the – the nests in the rookery are just out of pecking distance from each bird to the next nest, but when you walk through you
were within pecking distance from both sides so they do protect their nests and peck you. And they’re quite sharp beaks and so I got lots of bruised shins and in the end I wore my snow gaiters just to fend off the – the pecks from the – the beaks. I mean you try and walk between them but obviously you can’t sort of [laughs] – sort of go like – move your leg from one way to the next to just move out of the way of the beaks. So those are some of the sort of – the initial memories I have of that first few days of working in the Antarctic.

[08:15]

*Could you explain how the activities of penguins get in the way of activities of geologists?*

Yes, they do tend to occupy the best landing sites because they want obviously – obviously easy access themselves to the water to be able to go in and out to feed and any of the gently sloping rock – outcrops were their prime landing sites and then they would build the rookery just a little bit away from that, between the sea and the cliffs, [clears throat]. And it was the – the cliffs where you get the good vertical exposure so that you can see the sequence of – of rocks that you want to examine, so that you had to walk through the rookeries to get to the – the prime scientific viewing sites so to speak. [Clears throat]. So that was the – the real bug bear that, you know, any nice easy access was always via a rookery [laughs] and the other – the clean sites where – usually where there was quite a steep cliff and you had to judge the – the landing with the – the swirl that you had at the time.

[09:37]

*And what it – to what extent were the penguin droppings on rocks a more general problem than you’ve – you’ve told me the one story about the – a way in which they were –

On the Graptolite Island.
To what extent were they a more general problem for the observing and hacking off of –

I think that was the – the worst occasion actually because there was no higher location on Graptolite Island that we could get to above the rookery, so the … usually once you got through the rookery and then got to the cliffs or you could climb up a – a ridge away above the rookery, you could get to fresh samples, or you could walk to one side of the rookery and see what was at that level, so that was not a problem, it was just the – that one particular island where there was nowhere other than the rookery and that [laughs] covered the entire area.

Thank you.

[10:32]

Now when you returned from this first geological cruise you would have returned to Cambridge and did you immediately join Charles’ section or – ?

No, I asked if I could go into BAS and use the facilities to make thin sections of the samples of rock that I had collected because we were all going to write papers, collective papers on the findings. We did a preliminary one and Ian … and David wrote more about the tectonic setting and I think Mike did a small one on the fossils and I was wanting to do the petrology, so Charles was happy to make facilities available and I went in for three days a week I think voluntarily and worked – he allowed me to work in the petrology lab which was a small … a small room that they’d set aside just for microscope work, so I didn’t have an office and I just sort of got my samples cut and made it into thin sections and sat and described, so that was from [clears throat] probably March 1977 for about a year.

What was your impression of BAS then?

Hmmm, I liked the – the atmosphere much more because there were – it was – it was quite a small building at that stage, but we had all the different units within the survey there … so we met people that we’d only heard about before and – they were just sort
of names on sheets of paper so you saw all the administrative people and other scientists from other disciplines. At the time we didn’t have a – a communal … coffee room so again it was a small area that was set aside and you had to do it division by division for people, so you didn’t – you still didn’t have an integration really of the different disciplines ‘cause you still kept to your own divisions, even the geologists were taking their coffee at a separate time from the glaciologists, even though they were in the same division because the space just was not large enough to take everybody. So it was still almost on a – the original division base – department basis. [clears throat] but there were – because there were more secretarial staff all in the one place there were more females around and … I think there were more – some – there were some sort of scientific or lab assistants and they were usually female so there was sort of an increase in the number of females … and that gradually changed over the years, more and more females were appointed and became scientists, you know, on the scientific staff as opposed to the support staff.

[14:11]

When you were volunteering for that year in 1977, were there any other female scientists all in BAS in other divisions as well?

[Pause]. I don’t think so … not at the time. There was … a girl who worked for the Directorate of Overseas Surveys who was seconded to BAS and she spent most of her time at Tolworth in Surrey at the offices there when we were in Birmingham and hardly ever visited us in Birmingham, but when … when they setup Cambridge I think she started to spend a couple of days in Cambridge in an office and she was working on a new series of geological maps of the Antarctic peninsulas, carrying on from the one that I had done but a number of maps that had been published in the intervening ten years had increased so there were better basis for plotting [clock chiming] … and the first sheet that she was working on was at the northern end of the Antarctic Peninsula, and she wasn’t a geologist, she had this topographic mapping background but Charles had – was quite keen for this project to move forward and I think in the end she admitted that she wasn’t really understanding what she was doing from the geological point of view and at that stage Charles thought, well maybe I would help out with this because I’d done something like it before and I might be
prepared to come back and work on that. So he came and chatted to me one day when I was working on the petrology of the South Orkney islands and said, would I be prepared to come back and I thought about it and said, well I would come back on a part-time basis, because I wanted to continue with the South Orkney island stuff, and I hadn’t realised that that was such a problem but BAS didn’t employ part-time staff. However, Charles obviously made a good case with Dr Laws that, you know, I was the person to employ for the [laughs] geological mapping project if we wanted to see it to completion and if I wasn’t prepared to come back full-time then three days a week was better than five days a week. So eventually they agreed and I think it was March ’78 when I started working on the geological maps, and Liz Flemming was the lass who was working from the topographic point of view. Now Charles had decided that we should prepare these maps at one to 250,000 scale, now I had been working at 200,000 scale and they would eventually be published as geological sheets at one to 500,000 scale, so we … first had to make one to 250,000 scale maps and I think there were only six sheets covering the Antarctic Peninsula and probably forty sheets of rather non-descript maps at one to 200,000, they were very much sketch maps. Satellite imagery had become available in 1972 and we had large photo prints of these images at one to – nominal one to 250,000 so we tried to make sketch maps improving the old one to 200,000 scale sketch maps with adding coastline from these satellite images and relocating the … nunataks, the exposed rock peaks through the ice that we could identify on the images we – where they had been positioned on the original sketch maps and that was really Liz’ part of the project, she tried to get the topographic section – sub – sub sheets using survey details from Tolworth and then once she had produced the – the sketch maps then I would add the – the geology, and by then there was a lot more information available that both Mike and Peter Clarkson, who was a colleague of ours, and Charles had managed to get from Dr Adie when they moved, because we knew they existed somehow, I’ve forgotten how and [laughs] Charles confronted Dr Adie and said, ‘You know, we do need these maps,’ and the maps were in his office but not all of the field notes came to light. But I spent a long time, over several years, eventually going through field notes and preliminary reports again to improve the quality of the geological information because we had better topographic base maps on which to – to base these new geological maps and probably there would be about fifty geologists’ work from the past that was synthesised into these geological maps.
How did Charles get on with Ray Adie in terms of procuring this sort of squirreled away material?

[Laughs] That’s a nice way of putting it. Well I think Charles was pretty effective in his discussions, he could be quite a steely character when he didn’t get his way, he’d just sort of chip away at it I suspect. So I – I think he was very effective at – at getting what was available at the time.

Yes, I – I sort of know the very affable Charles Swithinbank, was there - is there a sort of side to Charles at work that I might not have seen?

Yes, well I – I would say that he – he comes across as very affable and open, but he’s – there’s also a steely quality there that he’s a very determined man and he will – he will get his way. I think he could be quite ruthless if needed.

And at that time that you’ve now joined Charles’ department, where were you working?

I shared an office with Liz Flemming so that she was sometimes not there because her – I was just three days a week in that office, just down the corridor from where Charles’ office was on the first floor and [clears throat] it was full of map presses and a light table so that one could overlay stuff onto the satellite images, we worked on film to make these new maps.

By film do you mean thin plastic sheets?

Yes, yes.

And what did you draw on those with?
With a rapidograph pen, ink, permanent ink and then used crayons to colour in the different geological units and this was all based on an international colour scheme for different age rocks and then you had to put a symbol on those coloured areas to indicate the age as well so that should the colour fade at least there would be an indication of the age. And then we put on the location of the igneous dykes, any radiometric dates that had been obtained, and we had several overlays actually, there was – there would be the topographic map that Liz had drawn in ink on the base map, then there would be a – a clear film with registration marks at the corners to overlay this on which I put the geology and then at the base of that I would say all the sources that I had used for that particular sheet. And then on top of that there would be another map where we identified all the geological stations and that was done in different coloured inks depending on which geologist had worked so that you got a feel for the areas that were covered were particular geologists, and having worked with them you would know what their area of interest was and so if they were a – an igneous petrologist and had come across some sedimentary rocks you might not be so sure that they knew exactly what they were identifying and sort of would look at other people’s interpretations if they had looked at their work subsequently.

[24:17]

So again it was this detective work, from going back through all the archives and the BAS archives was only just being set up then as a – a common access point for all the scientists at BAS to use. So for a while were just having lists of things that we thought might be appropriate and then trying to find where they were in the store before it got fully organised.

What about if you found a – the record of a sedimentary geologist who’d made some comments about igneous rocks and there weren’t any other accounts of those rocks to corroborate?

You – you had to include the data because it was the only data that were known about for that area and you could – if you were really unsure about the advisability of including it, particularly if it was a binocular observation, ‘cause sometimes when
they couldn’t access a – a cliff because it was just too high they would sit on the shore and use the binoculars and do a field sketch, so then you could always put a question mark in front of the symbol to denote that there was sort of some hypothetical [laughs] part to the observation.

Would there then be a sort of footnote to the question mark to explain that it was a binocular observation, or would it simply be that this particular observation had a slightly questionable status in that?

Yes, I think somewhere in the explanation there was. But whether that got onto the final published maps I can’t remember actually.

And – and as the new archive was being set up, what sort of date was this – was the archivist appointed and the – and the sort of – the filling of the archive rooms starting to happen?

Well I – it probably was not long after I’d joined, so it would be either ’79, 1980, something like that.

And how – how … how did Ray Adie get on with moving things from his room to this archive?

That I don’t know, it became a standing joke that if we couldn’t find anything it was probably [laughs] in Dr Adie’s office, or in his garage at home, because he said that he had boxes at home and of course nobody had access to those until after his death. But Joan Smith was the first archivist and she I think used to go and try and wheedle things out of him but didn’t – I don’t think she got very much success.

[27:00]

And was there any – did you have any contact with Vivian Fuchs at this time? I know that he’d retired.

Hmmm.
On the other hand, earlier in the recording you said that – you said – you gave me the extent to which you’d had contact with him but then said – you suggested you might have had contact with him at a later stage as –

That was much later actually because I was invited to join the … the Fuchs … Fuchs Fund [Fuchs Foundation]. When he retired a number of the – the FIDs made a collection and wanted it to set up a fund in his memory where … children from deprived areas could go on expeditions, so that they could enhance their … skills of working with other people and doing things that they would never be able to afford and there were a number of people on the – the fund board which – well they were trustees of the fund which had been – who had been with Sir Vivian on the trans-Antarctic expedition and as they had died or decided they didn’t want to continue, new members of people were – new members were invited to join, Charles was already on there and I think when they needed a – another person maybe it was he who suggested that I should join.

[28:38]

Hmmm … so that was one contact I had with him and there was another where there is a – a thing called the Antarctic Club which was, hmmm, how long has it been going for, about seventy years now I think and its only activity was to meet once a year for a – a dinner in London held in January and Sir Vivian was one of the, I suppose the commit – the organising committee, and it was only for men who had spent time in the Antarctic, so I mean if you were a woman and you couldn’t spend time in the Antarctic [laughs] then you were – weren’t able to join. It wasn’t until ’86 that they decided that there should be female members and it was Peter Clarkson and Charles Swithinbank who nominated me to become a – a member, they asked me if I would be prepared to join when we were all on the ship sailing … back to the – the Falkland Islands I think after a – a – the last cruise that I was on with BAS. And it’s not really my scene, just sort of dressing up to go for dinner but on principle, you know, I was going to join, just because they had finally [laughs] agreed. And part of the reason that they had agreed to let women in was because Sir Ranulph Fiennes and his wife had been on the transglobe expedition, both poles, and obviously Sir Ranulph Fiennes
was invited to become a member and they felt that because his wife had also been through all this whole expedition that she should also be invited, so that there was a sort of chink there and so at the time as she was invited to join then I was too, so the first time I went there were two ladies at the dinner.

Did you sit with her?

Yes [laughs]. We were put adjacent to each other [laughs].

And –

And Sir Vivian actually made a point of coming across at the end of the dinner and saying how nice it was to see me there, so I thought, well that’s a change, but at least he had the grace to do that, which was pleasant.

And did you speak to – presumably you did, what did you talk to Mrs Fuchs about?

Mrs Fuchs wasn’t there, it was – was Sir Ranulph Fiennes.

Oh sorry, yes, I mean Mrs – Mrs Fiennes, yes.

Lady – Lady Fiennes. Well she was very shy, even worse than me I think and she let her husband do most of the talking, so I can’t really remember and we did probably swap tales about what we’d experienced in the Antarctic, but I can’t really remember. And she came to the next one but then she didn’t so I was the only one again for a few years which was a bit daunting when you see all these chaps in evening suits and you’re the only female [laughs].

What was the range of reaction to you as – as the only female member of these dinners?

Hmmm … I think – well most – some people just wanted to talk because there was a female there and they wanted to come and be seen talking to a female and there were others who were friends of Mike who were asking about Mike and how he was and
why wasn’t he there, and he has never joined because he didn’t want to join an organisation that just met once a year to dine, he didn’t feel that there was that much out of – that he’d get out of it, he’s not a great one for reunions, in – in a sort of big environment like that. And then there were those that were generally interested in – in what I had done, so you know, it was a – the full range really of reactions.

*Did there continue then to be any open opposition from any quarters to the opening up of … things, FIDs to women?*

Not that was said to me.

*Did you know of any at this time?*

Hmmm … I think there were still people who … perhaps had been in the services and were used to a male only setup and wondered, you know, didn’t feel that it was right for women to be taking on arduous … activities in – or they thought they were arduous, and they would have been happier if the – if it had continued an all male environment, but I think the numbers gradually diminished of those, it was probably a generation thing.

[34:05]

*What was Dick Laws’ view when you – when you first joined in – to Cambridge in ’78 and Dick Laws was the new director, what was his perspective on this issue?*

Well when – it was interesting actually, when Mike informed – asked for permission to be able to go on this expedition with Ian Dalziel on the Hero and he said that I would be going as well, Mike said that – the comment was that this should not be seen as a precedence for UK women to work in the Antarctic, so there was – in 1977, or ’76 actually when he made that statement, it was still clear that they didn’t want to pursue the idea of women working in the Antarctic.

*So this was Dick Laws saying that?*
Yes, to Mike.

Thank you.

[35:08]

At this time when you first joined in the late ‘70s, what do you remember of Joe Farman at that time?

Hmmm, there was a – usually a sort of [laughs] haze of pipe smoke about this person and he – he was in another discipline on the far side of the building, I really had no contact with him whatsoever. He didn’t come to prominence until about ’85.

Thank you.

[35:36]

[Pause]. The period then from 1977 to … ’83 when you joined the research ship John Biscoe, which was the first time that BAS had taken women south?

Hmmm, hmmm.

Although I know you didn’t camp in Antarctica but you went on the ships out –

Hmmm.

What period – what attempts did you make in the period, in 1977 to ’83 to go to Antarctic – the Antarctic with BAS?

I – initially I didn’t make any further attempts because I was sort of determined to get these geological maps published, because it was a way of synthesising all the reconnaissance geology that had been done and in a way it was helping us to focus on the areas of research in the future and knowing where there were still gaps needed to be done on a reconnaissance basis, but also pinpointing areas where it would be good
to have specialist approaches to studying the geology with … experts rather than people straight out of university who didn’t really know what they were – well were beginning to find out what they knew about geology [laughs]. So that actually took – because I was only doing three days a week it took quite some time and Liz Flemming left in 1981 to … get married and go up to Scotland, I think, so I was left to try and finish the topographic maps and I think there were a total of … seventy odd sheets we had to – to draw onto 250,000 scale to come back down to one to 500,000 scale as five printed sheets. And I did manage to get an assistant to help with doing the compilation, Charles appointed somebody full-time to work on the – the topographic sketch maps and then he also had some geological training so he helped with the compilation and then I did – oversaw all the production, editing and production. And I think I did most of the research, telling him what to plot, find out all the original data. So that was pretty much … a sort of focus and I didn’t want to defer from that and I was still trying to do the research on the South Orkney Islands as well.

But the reason that I got … to the Antarctic in ’83 was … in ’82 – beginning of ’82 I think they realised that there was going to be a period when the Biscoe was going to be free from doing supply activities in the Antarctic and didn’t have a biological cruise that it needed to take part in and that the different sciences disciplines made bids to have use of this period of about six weeks, I think, in November through to January. So that would be November ’83 to January ’84 and the geologists were successful, but it unfortunately coincided with a period when ten geologists were already going to be on organised fieldwork in the Antarctic Peninsula, you know, this is all – we had a five year programme and they were already committed to that and there were three geologists left back in … the UK that could have gone on that and … they wanted a fourth and they were thinking about employing a – a fourth person just for the – the summer cruise. Mike was in the Antarctic at the – that time and I said, ‘Well there’s me,’ and I kept saying, ‘Well there’s me,’ [laughs] and … the – the geologist who was going to organise this, Peter Clarkson, was obviously not going to do anything until Mike came back and discussed it with him and I could discuss it with him, and sort of Mike was non-committal and so I had to push again and eventually it went – Charles was asked about it and he said, ‘Yes,’ and then it had to
go up to Dick Laws, but about that time Dick had a personal assistant who had joined him and she only came to help him if she could go to the Antarctic, so part of her appointment contract or agreement was that if she joined then she was going to go to the Antarctic, so she was in the administrative side but she was sort of assisting him with some of his research, I think, as a biologist. And they – the cabins in the Antarctic – in the John Biscoe were four berth, so they had to have four ladies to go with her and Ann Todd who had been with BAS since I think she graduated and was in the head office in Victoria, and dealt with lots of enquiries and was sort of I suppose the precursor of the administrative – of the archive section ‘cause she – she knew all what was going on and where everything was, so she was – she was coming up for retirement and so they thought that it would be nice if she went. And one of the … lasses in the … main office who dealt with people’s flights and getting all the right inoculations and things, she went, and then we had a lady who was in the Stanley office in the Falkland Islands and she welcomed anybody who arrived at Stanley off one of the BAS ships and organised their departure from the Falklands via the – the air bridge to Buenos Aires at the time, before the debacle in ’82, so she had been a long time employee on a sort of outstation and so she made up the fourth member, so they had got their heads round the fact that they were going to actually have women on the John Biscoe. But that was going to be after the period when I – this cruise, when the ship was vacant, so they finally agreed that having allowed four women – sort of planned for four women to go down on a – a tour of duty, they couldn’t really say no to having a woman going to do science. And the only proviso they made was that I had to sleep on the ship at all times, I could not do any camping overnight … so it was finally agreed that I should go. And I joined the – the ships in Punta Arenas in November of ’83.

What reason did they give for saying that you shouldn’t camp?

Probably because they didn’t think I had any – any training to survive and also I would have had to have shared a tent with a – a male and they just didn’t want that to happen.

Did you have to share a – with the boat not being large, did you have your own room on the boat then?
Well that was one of the reasons that they said that I was able to go, because the ship was pretty empty at that stage and so I could have had a four berth cabin to myself. And Charles was going to be on the ship too on his way down to Rothera [clock chiming], the – the main earth sciences station at that time in the Antarctic Peninsula, so he was doing a tour of duty as manager of the division and he was occupying the – the one cabin that was set aside for the senior personnel on the ship, so there were only going to be three of us – four of us I mean on this cruise and so there was a lot of space.

[45:43]

*Could you tell me about the other members, I've got J L Smellie as the leader?*

John Smellie [pronounced Smiley].

*Sorry [laughs].*

It’s pronounced Smellie [pronounced Smiley], it’s Scottish [laughs].

*Yes, okay. A B Moyes, P D Marsh and an assistant Simon Fraser?*

Yes.

*So could you tell me about those individuals who joined you?*

Yes, well originally it was going to be Peter Clarkson and Alistair Moyes and Phil Marsh, and then at – in the end Peter couldn’t make it and John Smellie had been one of the FIDlets back in ’74, ’75, just about the time that I was leaving and he’d worked with Mike in the South Shetland islands and then he’d gone to the British Geological Survey for a few years, and he had just come back to BAS so he hadn’t been part of the five year plan to be in the Antarctic, so he was a spare geologist who could take Peter’s position. So he took over as leader of the – the group … so his … interest was in volcanology, Alistair Moyes was a – an igneous petrologist, Phil Marsh had
worked in – out of Halley in Coates Land so he had no experience of Antarctic Peninsula but … I think his interests lay in basement rocks, metamorphic rocks at the time, but he was also interested in … the structure of – of rocks. So we had a varied … range of interests and Simon Fraser was doing some geophysical measurements, so wherever we went ashore he carried a – a gravimeter for doing a bit of geophysical work. But I think he was a field assistant and he’d just been lumbered with this task of taking this cumbersome piece of equipment [laughs] ashore and clunking it down on rocks and taking readings.

[48:04]

The – the reports for these landings have got a little subheading that says geology and field geophysics and you’ve mentioned that Simon – while the rest of you were geologists Simon Fraser was making geophysical measurements, could you say a bit more about the distinction between geology and geophysics at this time at BAS?

Hmmm, I don’t know that I can give you a very clear picture, but geophysicists tend to take lots of readings using black boxes and magical pieces of equipment, whereas the geologists were still going out with their pencil and notepad and a hammer and a compass, and so we would be going around doing the same sort of collecting work that I’d been doing in the – the South Orkney islands. Again reconnaissance, working with inflatables to get to otherwise impossible places to – to get overland, lots of islands off the west coast of the Antarctic Peninsula that had never been visited before, so we just didn’t know what was there until we landed. And so he – and he would be setting up his equipment just to make sure that he got some amazing readings out of this black box that was clunked down [laughs] and then they would take the readings and put them into a computer and number crunch and come out with a – a sort of – an idea of what was going on in the rocks.

Why did geologists not just take instruments themselves and –

‘Cause there’s nothing that can beat human eyes and observations, you know, for what the rock types are and their relationship, so it’s just a different – a completely different approach to – to a science.
What was the gravimeter doing, what was it finding, getting?

Hmmm, pass [laughs], I should know but I don’t.

What did it look like, the instrument?

It was a bit like an oil stove actually, it was quite a [laughs] – well from my youth, it was a – a tall instrument with feet that you had to adjust to get it horizontal, I think, on – on an uneven surface of a rock, but I’ve – it was – it occupied a rucksack so it was quite tall and obviously a very awkward thing to take ashore ‘cause you had to handle it gently, going out of a – an inflatable dinghy into – with that on your back and not making a crash landing or sort of leaping and jarring it as you landed was probably quite a … a challenge for him but being a field assistant he was a mountaineer so he had good – good skills for that.

Was there any banter between geologists and this geophysicist over this diff – difference in approach?

Probably, I can’t really remember, you know, because he was a field assistant rather than being a geophysicist, he wasn’t a scientist and he – so they couldn’t really get at him for doing some black box science when [laughs] he wasn’t really from that background.

It’s interesting that geophysics can be done – it’s almost done by the then – the equipment alone, you know, the … he’s not a scientist himself but he can take a piece of equipment out and position it and get the reading, so it’s almost as if geophysics doesn’t need a geophysicist in order to do its work, whereas geology does need a geologist?

Well a geophysicist needs to interpret the data once it’s been collected and I would think that they would actually need to be in the location to know again the setting from which it was collected, because they often used to come to us and say, ‘Well what’s the – the geological setting for this?’ they needed to have the underlying
geology to be able to interpret the figures that they got out of these machines, so there was a close link there. But they would have probably trained him, you know, obviously they would have had to have trained him at the sort of location that he needed to set up in and what sort of readings he should anticipate getting from the equipment and if he didn’t get those then something was wrong. But I don’t really know how they – they set up that programme.

And who was – who was using the – his measurements back at BAS, who were the geophysicists who would have been, as you say, interpreting the data that the black book –

Well the chief geophysicist at that time was Geoff Renner, I think he was – he was actually in Cambridge and then I think it was then that the geophysics department was still in the University of Birmingham because the chief – the real chief geologist – geophysicist, Peter Barker had a position in the department of geophysics at the University of Birmingham and he really didn’t want to come to Cambridge and so he had his small group working in the University of Birmingham. So whether it was he or Geoff Renner who … asked this guy to do that set of readings I really don’t know, Geoff might have left by then, I really can’t remember when he did leave.

And Geoff was in BAS or in the university?

He was in BAS.

Thank you.

[53:57]

Could you tell me then the – the aims of this 1983 ’84 field season crews with landings along the west coast of the Peninsula?

It was again to fill in gaps in the reconnaissance, we realised when we did the – the geological 500,000 sheet maps that there were large areas of islands that had never been visited, or certainly not recorded even if they had been visited. So it was filling
in the gaps, finding out what was exciting, you know, and possibly if there had been some collections previously they probably were just small collections and we wanted to sort of do it as a – part of a – a major programme so that they all linked in and we had the same people looking at them. So it was – we covered quite a – a wide area and I – yes that … at the end of that period the ship had to go north and John Smellie and Alistair Moyes stayed behind and they were given passage on the HMS Endurance that was a support staff – a support ship for BAS activities in some ways, and they were able to use helicopters to get ashore in some of the places that we couldn’t get to. Phil Marsh and I remained on the ship to go back to Stanley and we called in at Elephant Island and Clarence Island in the South Shetland islands to visit locations there because there are several big islands in the South Shetland islands and they’re fairly easy access, they have a lot of international bases on the islands, but Elephant and Clarence were at the – the north east end of the group and pretty wild and there are no bases there. So we decided we’d stop off there and do a few more collections, and I think we were only there about three or four days on passage through Bransfield Strait on our way up to the Falkland Islands and … I think we – yes we covered quite a good ground in those few days, the water wasn’t very good and then we went up to Stanley and picked up Miriam who was the lady that was going to be on the next stage of the John Biscoe.

The one who greeted people coming south?

Hmmm.

[56:54]

Could you describe a typical landing from the – from the John Biscoe in terms of, you know, from the – from approaching the coast, what you sort of get ready to take onto the – onto the land, what you do when you’re there, how you collect, how you make notes? I know for example one aspect of it was that you worked in twos rather than individually for certain reasons, so the actual practical process of doing geology on these landings and then getting back on the ship, what do you have to remember to bring them back and all of that – that sort of practical description of what you did?
Right, well sort of starting from the ship the – the – one of the officers would usually be at the helm of the dinghy, it was lowered over the side and there would be – one of the deckhands would also be there so there would be two men from the ship in survival suits and then four or five of us, depending on who was going to go ashore, of the science group and we would have waterproof trousers and waterproof jackets and then a lifejacket on top of that. And the ship would perhaps be about a mile offshore because particularly in the small islands there were lots of unchartered waters; well detailed charts were not available so [laughs] the ship’s master was always a bit cautious about how near he went. So you get into the – the dinghy via a – a rope ladder over the side of the ship and you had to time your drop into the – the dinghy from the – the rope ladder so that you were about to drop into the boat as the boat was coming up on the swell to greet you, because if you dropped as it was going down you probably might have missed the – the dinghy and – and got stuck between the – the ship and the boat, which wouldn’t have been very nice. So sometimes you landed in a bit of a – a heap in the – in the boat and then you’d quickly get out of the way and sit on the side of the – the rubber dinghy so that the next person coming in could go in. And you’d have your – I think you would have your rucksack on your back when you went down … because it would be empty, it would just have a Mars bar or something in for lunchtime, and – and your hammer and whatever. And then you would head off to the shore and get covered in spray ‘cause it was usually pretty choppy, and when you got to the shore you would look for a piece of rock that was jutting out from the shore that would make a good leaping off point. And it was really up to the skill of the – the boatman to keep the nose of the – the dinghy into the – the rock … so that you could – you did have a sort of fairly safe leaping off point. And you would all get up in the bow and, you know, sort of run off when the – the swell allowed you to have the prow up near enough to the rock to go out. Often a welcoming committee of penguins finding out what was going on. And then you would go into pairs and each of you would – each pair would have a – a rad – a two-way radio so that you’d be in contact with the ship or with the – the boatman so that should you need to be called back to the ship for any reason, you know, you could be because you were often out of line of sight of where you’d landed by the time you’d been ashore for about an hour or two. So we would normally – we wouldn’t just work in pairs, we work singly but you’d always be in line of sight of the other person that was ashore with you, and scramble over rocks and up cliffs if – if you could. Never in
any situation where you needed to rope up or anything `cause it was – it was fairly short term reconnaissance, and you’d make notes, hammer off samples, take readings of any inclinations with a – a compass, take photographs. And if there was something that you weren’t too sure about you could always call across to your colleague to come and have a look at this, what – what do you think and, `What the hell do you think this is?’ [laughs] and then you would [clears throat] sort of note the time and realise that it was time to go back to the boat and move onto the next location. And we would normally be out probably six hours or more, the – the officers always liked to be back onboard for dinner in the evening, and they would take a flask of hot coffee or soup or something and have something for lunch. And it was pretty boring for them `cause they could just – they just had to wait in the dinghies all day and it was pretty cold I should imagine, whereas we were moving around and would keep circulation going. But we rarely stopped for lunch, we … the bread was a bit dry for making sandwiches `cause it was home baked on the – on the ship and it wasn’t very palatable so we tended to rely on just Mars bars and things from the ship’s store. They unfortunately – because we’d been – the ship had been on a long cruise beforehand there was very much – little left and it had all got tainted by Avtur, which was the aircraft fuel, so it was rather [laughs] strange tasting Mars bars but when you’re hungry [laughs] keeps you going. And we’d have a [clears throat] – we’d have a flask of coffee that we had – we had brought from the ship [clears throat] so that we had something warm to drink, but it was, you know, you didn’t linger, you just sort of sat on a rock outcrop and ate what you had and then went on and did more work and then would have your evening meal when you got back to the ship at night.

[1:03:40]

**What did you do after the evening meal?**

Repacked samples to make sure that they were properly labelled, discuss what we had found and make fair copies of notes if possible. Or if it had been a particularly arduous day and you were just too knackered to do that you’d sort of read or just sit and chat.

[1:04:04]
What was the value of making a fair copy of the field notes?

Because when you’re just jotting things down, I mean you don’t write an essay on the outcrop, possibly if you’ve got cold fingers, it’s difficult to write with gloves anyway. So you’d just put down the essentials and sometimes you would – as you moved up the outcrop and you’d come across different horizons you’d – you’d realise the importance of what you’d just seen further back and so you could put into a sequence, a logical sequence if you did a fair copy at the end of the day and that – it was more like writing a diary really of what you had seen each day and I found that that was actually much more useful when I was back in Cambridge to try and write up … the information for a scientific paper rather than my rather disjointed notes and sort of g-schist meaning I’d just come across a green schist again [laughs]. It was a bit more expansive, so there was a – it made you think about what you’d seen really instead of thinking, oh well, I’ll remember that, you know, in three months time I knew exactly what I meant by those few notes, it made you interpret it properly.

[1:05:31]

Did you write another kind of diary at this time, of sort of – ?

Yes, I had a sort of – a small exercise book I wrote a – a fuller diary of where we’d been and what we had done, sort of more personal things, really so that I could ex – share it with my mother when I got home.

Where did you keep – what have you done with those diaries that –

I’ve still got them.

Have you?

Hmmm.

And is it a sort of private collection, yeah?
Yes.

*And how did you share them with your mother?*

When I – when we finished the cruise – well not that particular cruise ‘cause she was dead by then, but the first cruise Mike had stayed behind in … Buenos Aires to visit South American geologists that he knew so I had come back and then gone to visit my mother in – in Devon, so I sort of showed – shared them with her then, but unfortunately she had died by the time I went back in ’83, ’84.

*Could you say more about this occasion then, the first time you came back from the Antarctic and shared the diaries, could you tell me about your mother’s reaction and interest?*

Well she was intrigued, I mean she was very proud I suppose that I’d got there eventually [laughs]. But I … I think I’m one of those people that I need a prompt to sort of tell stories, I don’t just sort of launch in and say, oh well when I was in the Antarctic I did this, sort of thing so she had to trigger the – the memories in a way and I suppose I was with her about ten days before I went home and … she said that … it had been a bit slow, you know, my revealing all that had – had gone on but she really enjoyed it, and a subsequent visit I had some photographs of Mike’s that he’d taken so – of the area since most of mine had gone, so she could appreciate it from a slideshow as well, more stories I suppose came out then.

[1:07:56]

*Did – what was your sister’s view of your – your travels?*

Hmmm… yes, well I don’t know really [laughs]. I mean she … I think was quite pleased but I don’t know that she really appreciated that it had been such a – a tussle getting there.

[1:08:19]
And your father, were you in contact with him at this time?

He – he was already dead.

Hmmm, when did your father die?

It was either 1970 or ’71.

Hmmm. Did you go to the funeral?

Yes, hmmm.

And had – you’d had some contact with him at university before that had you?

Yes I had, my mother had informed him that his only – the only child of his that was going to university was going to a university in London [laughs] and he ought to do something about sort of contacting me [clears throat] and he did. He came once a term, I don’t know – I think maybe in the first year he would take me out to dinner and it would have been awful if we hadn’t had a third person with us, because I was incredibly shy and didn’t really know him, it was having dinner with a stranger, he was a quiet – he was a sort of silent man who spoke very occasionally and very cryptically and half the time you didn’t know what he meant [laughs] by what he said. But he brought along one of his members of staff who was an engineer from Liverpool and she – she was a female engineer, she was a lovely lady, very … homely sort of lady, married but no children, but she had a good sympathetic way of greeting people and she could just talk to anybody so, you know, she and I nattered away and father sat on the other side of the table and made the occasional statement [laughs] that I didn’t really know what it was. So I did get to – to know him. I didn’t like alcohol, I – my grandfather was a teetotaller and so we’d never had much alcohol in the house, my father drank gin and tonic and he expected me to drink gin and tonic and I took a sip of it and didn’t like it so I just had the tonic [clears throat]. But by the time I was having finals he said, ‘You really should be drinking gin, you know,’ and I said, ‘But I don’t like it,’ and he really got quite cross that I wouldn’t have it, he
thought that I wasn’t being a young lady if I didn’t have gin with my tonic water [laughs]. Very strange.

Why is that?

I think it was because in the 1930s that’s what everybody did, they drank cocktails and spirits and things.

So how did your relationship with your dad develop through these meals in – in the first year?

Well I knew but I mean I wouldn’t say that the relationship did develop, he was just somebody who … came once a term, when I had my own room in the hall of residence they would come and sit in the evening with me there rather than going out for dinner. He [clears throat] – he was scandalised by this bucket of coal, actually it was three times a week not once a week, but it was mostly slack that we had for lighting the fire in the room so he did provide me with a sack of coal which I kept in my wardrobe [both laugh] out of sight. [Clears throat]. So I – I mean I think he was probably quite pleased that I was pursuing a career that I was interested in but I don’t really know what he thought and he did – at graduation my mother said, ‘Well you’ve got to invite your father,’ so he was this rather lugubrious presence at the – the graduation at the Albert Hall but Birmingham – London University was such a large thing that there were two degree days, one I think in the October after graduation and then one the following May, so it was May ’65 before I actually got my degree ceremony and my mother and father attended that but I don’t know that we went for any celebration afterwards, you know, he just disappeared into the throng and [both laugh] I probably stayed with my mother near Reading overnight and then went back to Birmingham.

[End of Track 6]
Could you tell me about social life in Cambridge since you moved back as a married couple living in a Cambridgeshire village, so social life which could include those contacts that you made through BAS but others as well?

Hmmm hmm. In the village it was very small, there were probably about sixty houses and we were the – probably about the first incomers, so it had been essentially farming people who had lived in the village … and there were not that many professional people at all, there was the squire at one end of the village and some of his staff lived around in the cottages and in fact the house that we moved into, which was right on the edge of the village at the west end, had been built for the village policeman in 1905 so we were actually separated from the other buildings by a – a ditch and – well it was a tree lined ditch with lots of elm trees and we had open fields around us to south and west and across the road from us to the north and there was a small copse, so in fact it was very pleasant [laughs], you know, it was very isolated in a way but you – we were just a – a step away from our neighbours who were … at the end of the original six houses in – in the road so … we – there was no pavement outside our house so we didn’t have a lot of people going by on foot, you know, it was mostly motor traffic so people had to know us to actually come and – and call. So we had to make an effort to participate in village events so that we got known. We had the builders who were working at the house because it needed new electricity supply and a new water supply, so I think people were intrigued to know what was going on because before we had moved in it had been a sort of hippy commune and lots of things had got stripped out of the original building and we were trying to sort of put it back to as it was. So they were pleased to see that it was being properly lived in. And I think one of the first contacts I had with one of the villagers was … a retired lady who was three doors away from us and she came up one morning and she said – she wondered if I would like to go along to the WI … and I thought, well I don’t know that I’m ready for that yet [laughs] being in my sort of mid to late thirties at the time. But nevertheless she was a really nice lady and she had lived in the village all her life apart from when she was in service in a house in Cambridge, or had been a land army girl during the war, and she liked nature and … eventually we started talking about the bird life in – in the village and there was a – a medieval farmhouse, the site of
which had – was a sort of fortified farmhouse that had a moat around it, there were no
remains of the buildings as far as I could remember but there was still this dry moat
and it had a – a wood had grown up around it and badgers lived there and she told us
about this and she took Mike and I one evening to go and watch the badgers, which
were delightful, little cubs playing around at our feet, but one got eaten by mosquitoes
while standing there in the dusk so she introduced us to things like that and told me
quite a lot about the – the life in the – the village … before we had come. And
gradually not many – within the first couple of years other young professionals came
in as houses became vacant and we had a circle of friends of sort of similar age and
just meet in each other’s houses and have coffee or wine in the evening.

[04:37]

But the year after we moved was 1977 which was the Queen’s Silver Jubilee and the
… not the lady at the manor but the lady at another large house thought that we
should have a village meeting to decide how the village was going to celebrate on
Jubilee day and I volunteered to make a cake for the – the village for this event, you
know, like a wedding cake. And she organised everybody to provide ingredients for
this cake, so the postie would drop in with a bag of currants from somewhere and
[laughs] a pound of sugar from somewhere else and we got to know quite a lot of
people during that period. Mike had offered to put up a Scott tent from the BAS
collection of Antarctic tents so that people could get a feel for what it was like
working in the Antarctic and he had a sledge, so he had this display on the day and I
made these cakes and decorated them, iced them and using frosted flowers from the –
my garden and the hedgerow, and it was in June so there wasn’t a great deal of
flowers to choose from. But anyway it was a great success and we had a tea at the
rectory and the village … ladies provided sandwiches and it was all laid out in the big
rooms in the – in the rectory, so it was actually a good community effort and with a
small village you could do something like that. I mean towns they had street parties
on those occasions but, you know, we could get the entire village and visitors from
around who wanted to take part came along so games for the children on the rectory
lawn.

[06:32]
And it was after that I think that I agreed that I would join the WI ‘cause I got to know a few more of the – the older ladies in the village, but there were only about three of us of, you know, sort of late thirties early forties, most of the others were fifty, sixty, seventy or so. And … I think having joined the WI I then became the parish clerk just about the time that I went back to BAS on a – a regular basis so to speak. And I was asked – the current parish clerk wanted to give it up and go back to full-time employment and she asked me if I would take it on and I wasn’t too sure, Mike said, ‘Yes of course you can do it,’ [laughs] so I did it for five years and we had – we were so small, we weren’t a parish council, we were a parish meeting and we had two meetings a year I think in those days and quite a good collection of the population came and we argued about footpath rights of way and trying to purchase the village hall which had been donated by the squire in 19 – as a memorial to the 1914-18 people I think and it was the village reading room to begin with. So there was quite a lot of legal letters being written at the time trying to arrange for the transfer to the community from the – the squire. Which I think was just about coming to fruition at the end of the five years [laughs] that I was the parish clerk. One thing that was quite interesting being in that role was that we had our own village planning committee so that we could look at any of the plans that came in for development, extensions of people’s homes, and there was a requirement to try and build up the number of houses in the village, there were quite a few open spaces and so we had to consider those and whether it was appropriate to close the gaps or not. And I remained on that planning committee for twenty years, and even after I left being parish clerk, because it was mostly men on – on the committee and it was nice to have a female viewpoint. Hmmm … I … I think as soon as I joined the WI they said, ‘Would you like to come on the committee?’ and I said, ‘No,’ [laughs] I wanted to find out a bit more about it. But because it was a small group I – I think there were about eighteen members probably but not all of them from the village and we even had some ladies coming out from Cambridge to join us on a monthly basis at our meetings. Most people who were prepared to do it had already been president and there were some who would never do it, they just couldn’t face standing up and we were in danger of closing so in ’83 I said, ‘Okay, I’ll come on the committee and I’ll be president for three years,’ and [clears throat] I actually worked it very well because for the three years that I was president I was in the Antarctic every winter [laughs] so I could avoid being, you
know, there all the time, I didn’t have to sort of – I – I got a vice president to take the – the meetings whilst I was away having a good time [laughs]. And – and then we started to have more work done on our own house in ’87 so I said, ‘Well I can’t possibly be on the committee,’ so I came off for a while before going back on again at a later stage. So … there was the WI, there was the parish clerk business … and I mean we had a few friends and we sort of made entertainment within the village because it was difficult to get anywhere else because we didn’t have a car at – initially and didn’t get a car until 1981.

[11:15]

Mike had a – a motorbike as soon as we moved to Cambridge so that he could get to work, when I first went back to BAS in 1978 I cadged a lift with a colleague who lived in the next village two miles away and he used to come up and collect me. But I was always afraid that he’d forget me when he was going home because he went in early and left early and … if he forgot me I think we only had three buses a day – a week through the village in the normal times, but there was a commuter bus that went to the Pye factory, P-y-e, the electrical firm in Cambridge and I think that went past BAS about five o’clock so if I didn’t – discover that he’d left me behind it would have been a taxi to get me home which was quite expensive, you know, ten miles. So in the end … I decided I’d get my old bicycle out and I used to cycle to work and always had to have a change of clothes when I got there [laughs] and I did that a few years but it wasn’t much fun in the winter when it was dark when you cycled in in the morning and dark when you came home at night, and I went via the main Bedford Cambridge road and that was just two-way traffic and it became increasingly busy, built – traffic was building up in the early 1980s and when big lorries went by you got sort of blown all over the place. So I decided that it was time perhaps we should have a car, Mike doesn’t drive a car so it was up to me to get used to driving again, I’d passed my test when I was still a student.

[13:19]

But I didn’t actually get round to buying a car until after my mother had died in 1981 and, hmmm, she had a little Fiat 500 and she became ill in … I suppose January
February of that year and she had lung cancer which developed quite quickly and she was in hospital, and when she came out in June, I suppose, my brother said that she ought to have somebody with her when she was at home [clock chiming] and my sister was a teacher so she couldn’t easily get away during term time and he couldn’t get away so I said I’d go down for a couple of weeks. Quite staggered when I saw her ‘cause she’d aged so much in the intervening six months and she had always had a practice of driving around the family once a year, spending a couple of weeks with each of us before going back home so I said, ‘Well … I’ll drive you up to Pam’s and then she can take you over to Peter’s and then you can come to me and, you know, we’ll see how you are at the end of that,’ so I drove her in this little Fiat up to Pam’s in – this was from South Devon up to the Cotswolds and she did manage to make that final tour and she got to all of us but sadly she deteriorated while she was with me and died at my house so … in a way it was sad that she was away from her friends ‘cause we had her funeral service in Cambridge and it was too far for any of her friends to come up from South Devon, but it did mean that all my cousins who are based in the south east could attend. And … she was cremated and had requested that her ashes would be scattered over the family grave in Meopham in Kent, so that’s what we arranged but it was about six weeks before we could get that done. So in the meantime brother and sister and I had gone down to her home and sort of cleared it of all the paraphernalia of her life and my uncle and grandfather’s lives, ‘cause she hadn’t really touched very much when uncle had died in ’74. So that was a sort of mixed occasion with … our nieces and nephews there and Mike and my brother-in-law and sister-in-law. We had some high times sort of coming across things [laughs] that re-reminded us of our childhood, but sad times too. So that house was eventually sold but we – we did get my mother’s ashes scattered where she wanted them in the family village.

*Did your mother’s death have any effect on you in terms of how you thought about yourself and your life and so on?*

Hmmm, I think you suddenly realise what a position your mother has held in your life when they’re not there anymore. You’ve got nobody to sort of boast about things to, they don’t take – there’s nobody there that takes a pride in what you’ve achieved in the same way as, you know – I mean you can tell in-laws and – and husband and
brother and sister but it – the mother always has a sort of different pride of achievements. So yes, I think there was a big gap and probably took me about a year to get over it all. You think you’re coping quite well but there are times when you feel sad. And it was all rather sudden, you know, we hadn’t expected it ‘cause she’d been such a robust lady. So it was a rapid deterioration really.

[17:51]

At the time that you were … in the village and – and first a member of the WI and then its president, could you talk about the links between the WI and your Antarctic science, so any … any ways in which the two things met?

To begin with it wasn’t the Antarctic science which started me off on giving talks to the local WI, I mean because we were a small WI it was very difficult to obtain speakers that we could afford and there was a period when … they were desperately trying to find somebody to fill a slot and I – we’d been to St Kilda and done some voluntary work on St Kilda in the mid ‘70s and I said, ‘Oh well I’ve got some slides of St Kilda, I can give you a story about the islands and – an illustrated talk,’ and that was the first one I’d ever done and because it was a small group I felt confident enough to do it [laughs], so I did that and I had agreed to do another one in 1981 which was about the inland waterways, because we used to volunteer on the canals in Birmingham area helping to clear out canal locks of debris that had been thrown in and sort of improve the navigation, so I had quite a bit of industrial archaeology that I could talk about on the canals. And … it was unfortunate that that was about the time that my mother died so I don’t know that that was one of my best talks [laughs], but it was probably a couple of weeks after she died or something like that but they were all … pleased.

[20:06]

I have to say that my mother died the day before Princes Charles married Diana Spencer and I had made a – we were going to have a – a celebration in the village again so I had been asked if I would do a cake, so I had said yes, not knowing at the time that my mother was ill, and in fact I was decorating the cake while she was lying
on her bed in the same room [laughs] and she died the day – day before so we didn’t attend the – the celebrations but the cake was ready for – to go to the hall.

[20:43]

And then it – any time that they knew that we had travelled overseas to conferences they said, ‘Would you give a talk with your slides to the WI?’ and of course when I went in ’83, ’84 they said, ‘You must give us a talk,’ and then the next year, ‘Well there’s a sequel,’ [laughs], you know, and so it went on and a few of the local WIs heard about it too so they – I would go and – and talk locally. And in – when I was waiting to go to the Antarctic in ’85, ’86 I decided that maybe it was – would make a good article because my own WI had sort of helped me in that they were prepared to take over president activities and help the vice president whilst I was away so it was the sort of WI spirit of helping out that maybe I should contribute something by writing an article on what it was like to work in the Antarctic, so if course that – once that was published in – in the WIs Home and Country magazine I received requests to speak to WIs further afield, which I wasn’t so keen on doing because it meant travelling in the evening after work and speaking to people that I didn’t know, but they were always very well received, and I took a model of a tailors dummy [laughs] with the clothing on that I wore because most people expect that you’re sort of padded out in endless layers of thick insulation, whereas the BAS system is that you have fairly light layers, several of them but all fairly light so that you can still move freely. So I think that – that was interesting as much as the – the slides of the – the beautiful landscape.

Were the audiences interested – or to what extent were the audiences interested in your position as the first or one of the first British women to go to the Antarctic?

I don’t know that that was particularly an issue, they probably weren’t really aware until I started speaking that it had been a difficult thing for me to get to the Antarctic and many of the older ladies would say that they thought I was very brave going out there with all those men but, you know, that was the extent of it really [clears throat], because I don’t know that any of them were scientists in the audience or had any link with science so they – in a way to many of them it was just a travelogue, yeah, lots of
pretty pictures and somebody showing what – how they had been working somewhere, I don’t know that they really understood the impact of the work.

*And was there any influence in the WI of sort of feminist movements or is this a sep – separate?*

I wouldn't say that it was particularly, it was still [clears throat] – there was a – definitely a requirement for improving [clears throat] – improving the knowledge of WI members, but it had always been there, right from the start it was a way of educating rural ladies in how to improve their cooking skills and their domestic science skills and to tell them about probably medical matters and social issues. But it was never I don’t think a … a policy to press for equal opportunities for women. But now I mean it is – their voice is definitely one that is listened to by policymakers on lots of various different issues.

*So you weren't being – the interest in you wasn't as a sort of pioneer, as a –*

I don’t think so, I was never really aware of that. Because it was my own WI I suppose they – they just knew me and they wanted to hear what I’d been doing. It might have been from those other – those other – other WIs that had approached me from further afield but I didn’t really think about that I must admit.

*Because at the end of that Home and Country article which is – the year was probably 1985 that came out?*


*Ah, so it was the next year, yeah, okay.*

‘Cause I – I didn’t write it until I was going down in ’86.

*Oh I see.*

Yes, it’s –
And you – but it’s about the English coast –

Yes.

’84, ’85 season isn’t it, yeah?

Yes, yes.

Because at the end you say something like … the Americans have a more enlightened attitude than the UK almost –

Hmmm.

So I wondered whether there was any sort of campaigning element in it?

There probably was subtly [laughs], I hadn’t – I’d forgotten that I had written that, but it was at the time when there was still very few female scientists employed at – at the British Antarctic Survey, it was probably a year later that things began to change.

[26:41]

Because when Charles retired in November 1986 we had a new director, David Drewry, and three science divisions became six and glaciology became a division again in its own right, geology was a division in its own right and geophysics was in its own right, so there were three separate divisions where there had just been one with Charles in overall management of it. And Mike was appointed as the head of the geology division and Peter Barker was the – still at the University of Birmingham but he was regarded as the head of geophysics and they appointed a woman as the head of glaciology in – she probably came in early 1987 and part of her appointment was that she said, ‘I will expect to go to the Antarctic like any of the other heads of division,’ fair enough and so from then on things changed and they – she did go down south in … I think it was 1987 … I don’t think she was appointed in time to go down in 19 – in the 1986, ’87 season. But I’m just wondering about that because we had a – a
committee set up on discussing the – the … women in Antarctic science situation and how it could be improved and she and I were both members of that and that was in the summer of 1987 that we had these set of meetings. So I’m just wondering if she had managed to sneak down at the end of the ’86 [laughs] period? And her name was Liz Morris.

**What was the effect of changing from Dick Laws as director to David Drewry?**

Well Dick Laws had been – was a biologist so one always felt however fair they tried to be that there was always sort of an inherent interest in their own subject and pushing that forward, so David Drewry was a geologist so we were pleased to have a geologist back [laughs] as a director. He had been at the Scott Polar Research Institute in Cambridge as director there for a short period and he came to us and he was young and very active, still participated in Antarctic research to a certain extent, but he was more with a view to managing a big … research institute. And he was willing to listen to thing – how – how things were operating in the Antarctic because he had only ever worked in Antarctica himself courtesy of the Americans so he hadn’t gone though the – the sort of British Antarctic Survey system of going in by ship or flying from South America, he’d always flown in from New Zealand to McMurdo and operated in aircraft out of McMurdo, so he did have quite a bit to learn about the – the UK system and he was willing to do that. So he – he did have this … desire to reshuffle the – the [laughs] way the science was operated by having six divisions instead of three.

**What role did he have in the appointment of a female head of glaciology and the opening up of – Antarctic of –**

I think that was very much his – yes, he – he was director then and he – he saw that – he thought that women should be taking a higher profile and by appointing somebody at a – a high senior – I mean a senior management level then that was making them part of the policy discussion groups instead of it being all male, so I think he was very – it was a very significant part that he played in that – that changeover and it was he who setup the – the – the women in Antarctic science committee.
Could you tell me about the – the work of that committee, the membership and the work of it?

Hmmm, we had – by then there were a few lasses in life sciences who had been on summer … trips to the Antarctic, either as assistants on John Biscoe cruises for biology and I think there were a couple that had been at Signy based there during the summer … and so some of those were part of the committee to get a – a younger viewpoint on working in the Antarctic and there was one of the heads of the science divisions, life sciences divisions, senior member of the operational team in the Antarctic, and there was a head of personnel … there was Liz Morris, there was me … so I think it was probably half and half male and female actually, but there was a widespread of the age range and activities that one took – was involved in – within BAS. And we were discussing whether it was feasible ever to have women working in tents in remote field camps, so my experience was quite useful that I had already had two cruises on BAS ships and had worked with the Americans in – out of afield camp. And it led to a – a policy change in that I think they were going to allow women to participate in summer activities with a view to monitoring the situation and ultimately having women over winter in the Antarctic. So it was a – a slowly slowly approach which probably was better than just throwing everybody in at the deep end [laughs], I mean at least they thought about the possible ramifications of having people there of both sexes over the winter in isolated situations. But by then this had been going on at the South Pole station in Antarctica and McMurdo so there were other nations that were busy sort of promoting this approach anyway, so they had – they did consult with other national organisations operating in the Antarctic to see what their policies were and how they were evolving. There was quite a lot of effort went into discussing this situation.

How did the – could you tell me how the discussions got from the setting up of the committee in the summer – summer of ’87? What sorts of things were said and discussed, what were the sort of stumbling blocks and that sort of thing that eventually got to the point when – where a decision was made to have women camping in the summer season, monitoring to see if over wintering would then be
possible, could you tell me how – I mean did you all just sit down and agree that
straightaway, ‘Okay, we will have women in - in tents in the summer field season after
all, excellent. Okay, that’s – that’s good.’ How did that actually happen through that
committee?

I can’t remember how many times we met and there was – there was always a …
somebody had to go off and write a paper about something which could then be
chewed over [laughs] by the rest of the committee, sort of an Aunt – Aunt Sally. I’ve
just remember that one of the – the geologists in middle management was also on the
committee because geology was really the field science that – where people went off
into the remote field camps because biology operated either from Signy research
station, moving around within the South Orkney islands, not very far from base at any
one time, or they were participating in cruises on ships, so I mean we’d already
proved that that wasn’t a problem, so it was really this deep fieldwork that was the –
the stumbling block at – at the time and so hence the sort of – the views of the
geologists were – were sought. And one of the issues that had to be considered was
the feelings of the spouses left behind, of either sex, you know, if you go out into a
remote field camp it was usually two people and you took it in turns to cook for each
other and you shared the tent, you had an emergency tent in case your tent blew away
or got irreparably damaged and you had … sufficient food to – to last you for a few
months but, you know, it was a very intimate environment in fact to send two people
off to – especially if they were strangers, you know, of the opposite sex. So you had
to think if they were married or had partners how those people would react to thinking
about their other half being [laughs] in this rather intimate situation, away from
anybody else for a few months. So that – that was actually quite a serious
consideration because some of the – the men who had been going to the Antarctic for
many years, you know, their wives were quite concerned about this. And so we did
set up a group of personnel and women who had been to the Antarctic who would …
meet occasionally over the – the UK winter when the men were in the field and invite
wives of those men who had gone to come along and hear about how – what it was
like to work in the Antarctic and – and how, you know, if you were a scientist you had
a specific aim for the whole summer season that you wanted to get your work done
and you weren’t really thinking about [laughs], you know, starting a relationship with
somebody else and that even if you were sort of lying up in the tent because of bad
weather you always had enough books to – to take along with you or you had your notes to write up or something so it wasn’t as if you were just going off on holiday to have a good time, there was a real purpose for you being there. So that was one of the issues that we tried to address by having this sort of spouses group that could be there if anybody had any questions, who were not familiar with how one operated really in the Antarctic to come along. And I think that lasted for two or three years but eventually it fizzled out because there wasn’t really enough support from the wives to come and join in so sometimes it was me or one of the other female scientists and the personnel officer and perhaps one other wife, we met in a pub or sometimes at BAS for a coffee in the evening or something like that. But … perhaps it – it fizzled out because there was no need for it in the end, you know, people got the message and realised that it was a scientific activity and not a – a romantic [laughs] activity that was going to take place.

In the first year that this was set up, do you remember how many spouses came to the meeting?

Well I think the inaugural meeting there were probably six or eight, but not – not great numbers, but then it could have been because they had young families and found it difficult to get somebody to babysit for them to come in just for an hour or so from an outlying village, because a lot of the people like us did not live – live in Cambridge, they were sometimes even further away than – than we were, so, you know, fifteen miles or twenty sometimes. So just coming in, doing a round trip of forty miles for a cup of tea and a biscuit probably wasn’t [laughs] what they were thinking of an enjoyable occasion.

And what were they saying – sorry, what were they saying at those meetings about their – about their concerns, I mean what did they raise?

I think a lot of them at the time didn’t really know what it was like working in the Antarctic and possibly – let me think, in the early days the only communication that you had with your partner in the Antarctic was I think – it was either 100 words or 200 words a month which you had to put – write down on paper and then it was telexed from Cambridge so somebody, you know, retyped it into the telex machine
and it went to Stanley and then it was broadcast – maybe it was telexed then to the Rothera base or whatever base they were on and then it was broadcast over the radio for all to hear, so you had to be fairly guarded in what you put in [laughs] and then the same would go in – with return that once a month the man in the Antarctic would send his thoughts back home. Letters could be written but they had to wait until the ship came into the base and then went back to Stanley in the Falkland Islands and, you know, sometimes you will get three or four letters all at once, which was very nice of course but, you know, there’s a long period in-between when you didn’t hear anything. So to start with we still had that – that business although it was faxed down rather than being telexed. And I think – I’m trying to think when email came in, it would be in the ‘90s and that was wonderful because you know it was no third person was between you and your partner and you could … be more natural, it wasn’t, you know, you’d write your 100 words and then you’d have to précis it down so you left out all the As and the Ds and the whatever wasn’t really needed, so it became very stilted conversation that you had once a month. So I think when we set this committee up that was still rather the way, that it was a limit to the words and the communication so they didn’t really – if they were fair – if their husbands were fairly new to the work in the Antarctic they weren’t sure what was happening down there so it was a way of them finding out a bit more about the operations in the Antarctic.

_Were they aware in the – in the way that the group was advertised and set up, that this was about reassuring them about women going to the Antarctic with their husbands, or was it presented merely as, you know, here is some information about your husband’s work, with that left completely aside?_

I suspect that it was the latter, that was a way of improving communications between the spouses left at home [clock chiming] and the work of the survey but that it was a – a forum really where anything could be raised, any concerns. And it was up to whether, you know, the – there were individual concerns whether the subject was discussed within the – the wider group or not.

_And yet it came –_

I can’t really remember.
And yet it came out of the women’s in Antarctica –

Yes, yes.

Antarctica committee.

Hmmm, so I don’t – I mean I didn’t see the – the way – I don’t think I saw the way that it was advertised as partners, it was up to the personnel to – section to – to encourage that, to interact with the – the spouses.

Whether through this – the mechanism of this meeting or not, did spouses write in or phone in or – or come in and express any objection to the opening up of the Antarctic for female scientists alongside their husbands?

Well whether they did or not that was the perceived situation, that – that there were objections, you know, why should my husband sleep in a tent with somebody else, I mean that was one of the issues that that was always – I recall being raised at these meetings that we had for the women in science.

Who was raising those?

Well I guess it came from the personnel officer, you know, that he would have had these … comments made to him or other people had had them made to him and they had referred them to him.

[45:59]

And were there any – at this time any people on this committee, or within BAS more widely if they weren’t on this committee, opposed to the kinds of things that you wanted to happen, in other words for women to camp?

There was a diminishing number of men who still wanted the – the old way of doing things I think.
Who were prominent among those wanting the old way of doing things?

The personnel officer [laughs] … and I think some of the senior division heads did have some reservations but they were not sufficiently significant to stop them trying to address their – the whole situation of improving the lot of – of women in science in Antarctica.

[46:55]

What was the background and history of the personnel officer at BAS?

He actually was an upper atmosphere physicist … and a Scotsman, quite a reserved character, and I think he just possibly had been indoctrinated by the – Bill Sloman who was the previous personnel head of administration. So I think it was a bit of the old guards sort of still fighting … the new way of doing things, but because the director was for it, you know, he – he – maybe he was just being devil’s advocate, I don’t know, but I think there was more of a personal issue there as well, that he didn’t think it was right that women should go for any period of time.

Is there anything about your knowledge of him as a person that made you think that it might have been a personal objection as much as an institutional one?

Well I think it was just from the discussions within the – the committee that I got that feeling. I mean he was perfectly pleasant, if you spoke to him he didn’t … say, ‘Oh well, you know, you’re a woman, I’m not going to listen to what you say,’ he wasn’t – wasn’t anything like that, he accepted your judgement on things. But … I think he was – he was just maintaining his view of how things had operated successfully in the past and he wasn’t sure that it would be improved by the new – new way of doing things with women [laughs] working in the field. So – and I think he was one of the main people that I can think of but … there probably were other people who didn’t come in within the remit of the – the committee and it would be just, ‘Oh well so and so’s a bit of an old die hard, you know, [laughs] never going to change him.’ So in general it was from then on a gradual progression.
Was Fuchs ever popping up at this time in his sports car at the – at BAS?  

No, no, he didn’t come into BAS at all, only for meetings of the Fuchs Foundation.  

Hmmm.  

So when, as a result of this committee, did the first women from – from BAS camp over the BAS – Antarctic winter?  

I think it was 1989 when Mike appointed a geologist, Debbie Armstrong, to do some fieldwork in – I think it was Alexander Island which is a large island off the Palmer Land and I – I’m not sure about Liz Morris because she may well have also been down doing glaciological work in ’88, but she was already there whereas Debbie was appointed specifically as a – a geologist to work in the Antarctic, like all the other BAS geologists that have been appointed.  

And how did the monitoring of women’s performance in the Antarctic, you know, summer season, how did the monitoring go into, you know, with the view to allowing women to over winter – how – what was the sort of chronology of that decision?  

Hmmm gosh, I’m not really sure. It’s funny how a tide can turn really, that it becomes a major step and then suddenly it’s all accepted and it ceases to be news, a bit like the media isn’t it, you know, there’s all this kafuffle about things in the news for a day and a half and then suddenly they move onto another topic and that one’s dropped dead, I can’t say that it was as – as rapid as that but once we’d had females working in deep field, working in tents … and because one had to spend time in … on the bases before and after you’d been in the deep field, they saw how women
interacted with men on base for any period of time and they also had the ships journey
down from Stanley … I think that it was … I wonder if it was also affected by the
introduction of the Dash 7 aircraft which allowed flights in from Stanley direct to
Rothera, you didn’t have to wait for a ship to take you down for four – four or five
days journey travelling down from Stanley, and it was ’94, ’95 I think when there was
a crushed rock airstrip was built at Rothera, so instead of using the ski runway that
they’d used with twin Otter aircraft, they had this four engine Dash 7 DeHavilland
aircraft that could land directly onto the airstrip at Rothera. So should there have been
any emergencies or, you know, clash of personnel or something [laughs] somebody
could be rapidly removed and four hours later they’d been in Stanley, so that also
added a bit of … freed up the sort of remoteness of the – of the Antarctic, made
perhaps the senior managers more comfortable about having a range of people in the
Antarctic. Although that did not apply to Halley which was our remotest Antarctic
station where much of the upper atmosphere physics is done, it’s on a floating ice
shelf and is only accessible by ship and for a fairly brief time each summer when the
Weddell Sea ice breaks up and the ship can get in. And they do now have females
wintering over there and that really is very remote, it’s a bit like being at the South
Pole, in fact probably more remote because it’s not accessible by aircraft whereas the
South Pole can for some periods of time be accessed by aircraft quite late in the
season and early in the season. Whereas at Halley, you know, once the ship’s gone,
that’s it; you’re there for quite a long period.

[54:18]

To what extent were different disciplines within BAS sort of feminised at different
rates and if so – if they were how would you account for the difference in?

Well I think probably we’ve already covered that in a way because the biologists were
the first to have summer personnel working at Signy, which is quite some way north,
and so … they would be dropped off by the ship on its way to the – the stations
farther south, so they had a longer period of work actually available to them, work
period. And they were just station operating, going out for short field trips, and then
there would be the earth science people working out of the Rothera which was the
main station much farther south where you had to be flown into your area and then
worked as a deep field personal … deep field with a personal assistant helping you … and travelling around overland with skidoos. And then there was the upper atmosphere physicist who worked out of Halley who were on station really just looking at monitoring equipment at the station and not travelling any distance from that. So I think discipline did dictate and because of Halley being so remote that was probably the last one where females came in and worked.

Thank you.

[56:04]

*Now I would have thought that when you were taking part in these meetings in 1987 regarding the position of women in BAS, one of the kinds of experience that you could bring to bear on that committee was the fact that you had camped in the Antarctic on the ’84, ’85 season with the Americans on the English coast geological survey, could you describe – or could you tell me about the origin of that and then describe that particular field excursion?*

Hmmm, well I think that was the greatest experience of my life actually [laughs] it was – it was great fun, quite a challenge and I got a lot out of it. It started because … in a way it stemmed right back to that 1970 geology conference in Antarctica because when we were there we were invited by an American to join him and his family in Colorado for a summer holiday and two years later that’s where we went, and his name was Paul Williams and he was a member of the US geological survey in – based in Denver Colorado. And he had a very nice house in … out in the sticks in Colorado, and I think he was busy for some of the time that we were going to be there and he invited one of his younger members of staff to take us when he went out to do his fieldwork in Utah, and this guy’s name was Pete Rowley and he came along, he said, ‘Sure I’ll take them, I’m taking my wife and two kids and big poodle but we’ll all go in the US geological survey jeep and we’ll end up in a … a hotel somewhere out in Utah,’ but he took us via the Grand Canyon [both laugh] where we stayed in a log cabin and ended up in Cedar City. So we got to know him quite well, when you’re cramped up in a – a jeep with all the family and the dog in the back in a very hot environment you get to know somebody, and he was quite good fun, Mike and he got
on well. So that was in 1972. And in 1977 Pete was organising a reconnaissance survey trip to the southern Antarctic Peninsula in Palmer Land and he thought it would be nice to have some UK collaboration so he invited Mike to take part in that trip. And they went to … the Orville Coast, which is on the east – southern east coast of the Antarctic Peninsula, and he was away for five months on that trip and … hmmm, I was still working on the 500 G map series and we needed some input to the south east coast of [laughs] Palmer Land because there was nothing that BAS had done that far south, so I collaborated with Pete in getting his data to put in on the – the UK map series, which took quite some discussion because although he was very happy to collaborate he wanted to make sure that USGS got their full credit for doing the work. And so we published that sheet and … in ‘84, ‘85 he set up plans for another – no, in 1984 he set up plans for another Antarctic expedition to another part of Palmer Land which hadn’t been covered by anybody, and we met him in Adelaide at another Antarctic geology conference and, you know, because we’d – we were friends by then, you know, and had known each other a long time, we were all sort of sitting having a dinner one night and he said he wanted to have a UK person … and he said, ‘Would you be prepared to come again Mike?’ and … Mike was already – I think he was going to be doing something else that year so he said, ‘I’m not free,’ and I sort of looked interested so he said, ‘Sure, you know, why not?’ so he had to make a case – he had to write to me and say, you know, could I be released to go and this was when Dick Laws was still the director and … he couldn’t really say no because I’d already participated – he’d given me permission to go to the – with the John Biscoe the previous year, so although it wasn’t my job as a mapping geologist to be going out to participate in this fieldwork, because I had specifically been requested to go he agreed to let me go. So I had to pass all the medicals for the – the Americans and in due course I – I headed off to Colorado to join the – the team in … the USGS, I think there were four of them from the USGS in Denver and then there was … Tom Laudon, who was professor of geology at the University of Oshkosh in Wisconsin, and … oh gosh, I’ve forgotten the name of the seventh person, he was from Sonoma State University in … California and he joined us much later ‘cause he couldn’t get away for teaching commitments, it’ll come to me in a – Walt Vennen, that’s right, that was the last person … most of us were sort of in our early forties at that stage, there was one guy who was late twenties and Tom was in his early fifties, so there was a reasonable range of ages. And we – I can’t remember whether Tom joined us
in Los Angeles for the flight out to New Zealand but certainly, you know, the five of us headed out from Denver to Los Angeles and then onto Christchurch and eventually we – we got the Hercules aircraft and flew out to McMurdo, and the American system is that you collect all your Antarctic gear in Christchurch airport – at Christchurch airport and you have to put it on to travel in, and it’s the height of summer in New Zealand and you’re all hanging around in all this extra thick padded gear which you can barely move in and there are white plastic boots that look a bit like Mickey Mouse boots which are supposed to be insulated and keep your feet warm whilst you’re sitting in this awful aircraft. And we eventually – I think usually you have several days delay, you – you get your gear on and then the flight isn’t going to take place because the weather’s too bad at McMurdo ‘cause they have, you know, eight hours flight anything can happen in-between and you’ve got to be able to land on the – the sea ice – the ice shelf at McMurdo, so it did take a while to actually head off and I was surprised to find amongst all the crowd when we were on the aircraft one of the BAS biologists was also on it, he was going to work out of the Scott base, the New Zealand base next to McMurdo, so we chatted with earplugs in because of the noise of the – the Hercules aircraft but we just sort of lip-read each other’s conversation [laughs], so that was quite nice to sort of meeting up with him. And – and then we – we got to McMurdo and were put into some sort of bus with huge balloon tyres that rolled off the ice shelf and up the – the slope onto the cinder track to McMurdo but it was a pretty – pretty ghastly journey, it took about half an hour and it was – there was so many people that some of us had to sit on the – the gangway in the middle on people’s … bags, and because of the balloon tyres and the rough surface you were rolling around all over the place so I began to feel rather seasick [laughs], but we got to McMurdo and sort of had various initiations and spent a – a fortnight getting all our gear ready to go off to our field camp which was at the base of the Antarctic Peninsula, so we then had to fly all the way across the – the continent in another Hercules aircraft, but with just the seven of us in with all our gear. And … again there was a – a delay because of the poor weather, I have to say that before that we had emergency training in how to survive in the Antarctic and sort of going down a crevasse and hauling a person up by yourself with all the hitches of rope that you can use to get – fish them out. Building a snow house should you tent blow away you learnt how to build a – a snow igloo. So we got into our – our aircraft and there was a – there’s been a very heavy snowfall the night before so there was a lot of deep soft
snow on the runway and we all had to sit at the back of the aircraft along with all the – the gear just sitting on the – the boxes of things that we’d packed to take with us so it was sufficient lift for the aircraft to take off [both laugh], so there was no health and safety in those days, you weren’t belted in anywhere. And we arrived in deep soft snow and the aircraft slowed down by going around in a circle and jettisoned all our stuff out the – the back of the aircraft and we walked down the ramp and the aircraft went away and suddenly we were in this deep white wilderness and we hastily put our tents up, and as I said, there was seven of us in the party, so we had four tents and being the odd woman I had a tent to myself. Unfortunately it was a dark green tent and no light permeated it so once you were inside you could barely see your hand in front of your face and the – only half of our supplies had come with us because of the weight restrictions and we had to wait another ten days I think before the rest of the – the equipment came in because of bad weather again, so I was stuck with this dark green tent and Tom lent me a torch but batteries don’t last very long in the cold environment so after one day that – that was it, I still didn’t have a [both laugh] – any light inside the tent. And we had lots of bad storms and one of the – the difficulties really was that I couldn’t hear if anybody else was moving around in the camp because of the noise of the snow being blown against the – the tent. So I used to have to untie the – the entrance to the tent, and with pyramid tents you have a – it’s a double walled tent and the entrance is a hole some distance above the ground which has a sleeve which you tie up once you’re inside so that it becomes snow tight and you don’t get any snow blowing in, and so you had to untie one sock to get from the inner tent and then another sock to get outside, so it was a bit of a palaver, especially when it all got frozen up each time, and you’d stick your head out of the tent entrance and find that there was probably rather a lot of snow up round the tent because it had been blowing overnight and you wouldn’t hear any sounds and so you’d have to go right out and see if anybody else was around, and quite often I was the first one up, you know, [laughs] had to be sort of – go back to my tent thinking, when are they going to get up, I need a drink of hot, you know, liquid of some sort. But we had one tent where Pete and [pause] Karl Kellogg, was another of the – the US geologists, they shared the tent where we all met and cooked and had our breakfast and dinner in, so until they showed a leg so to speak we – none of us could brew up because all the other stoves that were still on the – the – the plane waiting to come out to us. But eventually we all had stoves in our own tents and had the wherewithal to make a hot
drink if we needed it. So that was the start of it all and ... because the Americans were aware of stereotyping gender tasks they made sure that I didn’t do the cooking, so it was a really nice holiday for me. I just sat back and [laughs] was provided with meals. I mean I did occasionally help out, if Carl was the allocated cook and if he was busy doing something then he’d ask me if I would – would help out but on the whole I was … let off pretty lightly actually, because in the British system the two of you took it in turns if you were sharing a tent. Hmmm …

[1:12:45]

That’s one effect of you being female on this trip in the sense that they – they avoided giving you cooking –

Hmmm.

For – almost for fear that they would be – you – you might imagine that they were expecting you to do it because you were female, are – were there any other effects of your femaleness on that trip do you think?

… They – I don’t think they expected me – me to be particularly strong so they were very surprised when I could lift boxes full of rocks around just the same as they could. I was fairly strong probably from my rowing, you know, I had good muscles and I’d always sort of kept up being fairly fit doing things. So I think that surprised them to a certain extent. They hadn’t anticipated that I would be able to put a tent up, but then my camping experience as a child, you know, was – it was just second nature in a way. [Clock chiming].

[1:14:01]

One of the things that was a real problem for me, and that wasn’t a gender thing it was just that I hadn’t skied before, I had been on a package tour for a week about eighteen years before and when I said, ‘Oh yes, I’ll – I’ll go to the Antarctic,’ [laughs] I hadn’t really thought about the fact that I be needed – needing to ski. Because Mike doesn’t ski, he never skied, he doesn’t like sport of any sort and, well, he’d gone every two
years to the Antarctic and managed quite well without skiing, even when he was running a – a team of – of dogs he would run alongside the sledge with them rather than being on skis, which is what some people used to do. So – and he had survived with Pete for several months when they were working on the Orville Coast, so it – it really hadn’t dawned on me that I might be required to ski until Pete when we were at McMurdo said, ‘Right, well we’ll go down to the – the hut and choose our skis,’ and I thought, ooh, oh dear [laughs]. And he said, ‘What sort are you used to?’ and I said, ‘Hmmm, I can’t really remember,’ [laughs] anyway he selected some skis and they were these very long skis for traverse skiing because of being pulled behind the sledges and I didn’t even know how to do the bindings or anything so I had to be shown that. And we had a few test runs be – being towed by skidoos out on the ice shelf where I – if I felt that I wasn’t too stable I’d just sit down in the snow and that became my technique throughout the [laughs] – the period, which to begin with caused them a lot of concern when I just suddenly sort of crumpled ‘cause they thought that I’d be breaking something but I – I always managed to fall in a relaxed way so there was never any problem. But they were – apart from Tom, they were all expert skiers, having grown up in Colorado or California and they were sort of – did wonderful smooth actions going down slopes and everything whereas I was a bit of a struggle. But they were very … courteous, they never laughed at my antics and they were there to help so it was – it was a very nice atmosphere actually and because we had three skidoos and they pulled a pair of sledges each with all of our camping equipment and requirements for the long traverses that we made and then there would be a solitary skier being towed behind the last sledge, ‘cause I was a novice there was another person that went with me. So we had a pair of us being towed by one of the skidoos and then there was just the solitary person behind each of the other skidoos and the youngest bloke was put on the pair with me, probably thought he would be the most capable of skiing quickly to me if I came into any [laughs] problems. So I mean it all worked out very well actually and sometimes – and – and Tom was our driver and he liked to smoke cigars and chew tobacco, and he would be sitting in the skidoo driving along chewing his tobacco and not really thinking about what was behind him [laughs] and sometimes he’d turn too sharply and we’d be going across tracks and I’d lose my balance and down I would be and Dave would stay on hanging onto the ropes sort of waving his arm in the air trying to attract Tom’s attention and then eventually he would think to look back and so he’d have to do a big wide circle to come back
and pick me up [laughs]. And that was the way we progressed but I mean it was all … it was all a good relationship, nobody ever sort of shouting and said, ‘What the dickens did you do that for, you know, why can’t you stay up on your skis?’ [laughs]. But I did get proficient over the – the couple of months that I was there, my technique improved [laughs].

[1:18:43]

*How did you get the impression that they were surprised that you could carry boxes of rocks and put up a tent?*

Well they just sort of said, hmmm, ‘How on earth can you manage to – to lift that?’ and they just – I suppose they weren’t possibly used to working with – with women in – in the field so they didn’t know that we were capable [laughs] of lifting heavy weights. But we built a snow house for all of our equipment at the base camp and this was a – a series – there was a series of ice steps down into this shelter which had a gable roof of snow blocks across it so we – you could stand up in the middle and all the equipment and frozen meat that had been taken for supplies was stored on the shelves – ice shelves either side, and we had wooden crates with rope handles to put the rock samples in when we returned to McMurdo but they were filled with bottles of wine and beer and spirits ‘cause you were allowed so many bottles per week I think, it was probably one bottle of wine per week from the store in McMurdo, and so we were going to be out there for six weeks and there were seven of us so there was quite a supply of alcohol [laughs], a lot of it got frozen and so lost its flavour. But they were all in the – we packed these – I did most of the packing at McMurdo and packed these in the – the wooden crates so they were quite heavy when you lifted them, and so there’d been quite a lot of person handling of this equipment [laughs] before we got them onto the palettes to get into the – the aircraft and then we had to man handle them down into the – the snow store, so that’s when they began to appreciate that I could lift quite heavy things.

[1:20:55]
Did you have any sense that in some ways they were – that their conduct was altered because you were there?

I think to begin with they were very cautious what subjects they approached and Tom who was a – an old friend of ours as well as Pete, could tell some rather risqué stories and sometimes I understood them and sometimes [laughs] I didn’t but I just sort of smiled and laughed it off. I didn’t make an issue out of any of it and the best way was to laugh and sort of not cause friction so in the end they relaxed and were fairly natural about it all. So it was a good atmosphere.

[1:21:46]

Could you describe the – the scientific work on that trip, both in terms of its aims and its particular practices?

The aims were as before, we were covering an area that had never been mapped so that was an exciting part of it. We did have very bad weather so there were a lot of lie up periods in base camp and then we’d make a – a foray out with our cavalcade of sledges and skidoos and skiers and set up another camp somewhere else and travel to the – the nunataks nearby and then back to base camp and then out in a different direction collecting samples … for age dating and thin section and geochemical analyses so that we could find out just what was what. We came across some very young looking volcanoes which was of particular interest to me, it was very different from the metamorphic rocks that I had been working on in the South Orkney islands and there were a lot of interesting features that I worked on later and that was – that was a sort of – a new direction for me with geology, almost back to the days when I’d read the book about volcanoes from Reading library actually. We … were more or less the – the usual techniques of a hammer and a notebook and a pencil. We had aerial photographs to able – enable us to find out where we were because there was a very basic US geological survey sketch map of the area which had been based on aerial photographs taken in the mid 1960s I think, so that was two decades before and some of the – the ice had covered areas that had been free at that time and – and vice-versa, you know, there were new areas that were exposed. And if we hadn’t had those aerial photographs I don’t think we’d have been able to really suss out where we were
just from the sketch maps that we had. So that was a slightly different technique from how I’d operated with the – the BAS ships, although we did have aerial photographs there too but they weren’t so essential. Hmmm, I don’t remember that we actually had any satellite images although we ought to have done by then. But maybe Pete just didn’t have them to hand. I can’t remember.

[1:24:56]

Was there a different method involved in taking a sample depending on the kind of rock that you were looking at, so in other words when you were dealing here with igneous rocks, was the method of, you know, hacking a sample from it different from –

Not really, no. I mean you still try to get as much as you can. The only time the situation changes is – is if you find fossils and then you have to be – you get very careful how you take off a piece that will provide you with a fossil that’s intact and if you see a nice one exposed on a surface you’ve got to be careful that you don’t destroy it by hammering it off in an inappropriate fashion [laughs]. And we did find … some fossils, we had – it was one of our trips out from the base camp where we had run into a severe snowstorm, we hadn’t a clue where we were and we camped and we were stuck in this storm for a couple of days and when the weather eventually cleared we were in a bit of a – a basin up on a plateau and we couldn’t see anything apart from a little grey pyramid on the – about a mile away, so the – Pete I think and somebody else set off to find out whether it was a distant peak and take a bearing on it and they found that it was not as distant as they thought and it was just a small outcrop, but that it had fossil plants on it and this was totally strange for the area so we all took it in turns to go and have a look at this and take photographs and it really – I mean it was no bigger than a settee in – in size, it was – really was a tiny thing, but having got to that we could then find out – we found other peaks came into view and we could find out where we were so we set off, but because it was in the middle of nowhere I said, ‘This ought to be Erewhon [inaud],’ and I couldn’t quite remember how to – I said, ‘Oh it’s nowhere backwards,’ and the Americans hadn’t heard of Samuel Butler’s book Erewhon so they – they took me literally and the way they spelt it was nowhere backwards but the H is in the wrong place ‘cause of course you can’t pronounce Erewhon with H after the – the O instead of, you know, I mean the other
way around. So we had a little bit of a bone of contention when we got back, I got back to the UK and they got back to the States because they had proposed the name in the States with Erehwon spelt O-H and I had it as Erehwon W-H-O [laughs] so the UK place name has a slightly different spelling of that to the Americans. But it … it really was a rather desolate location but I think that was the only fossil locality that we – we found in that season and we covered about 700 miles during that period that we were there travelling around from site to site, but going back to base camp in-between times.

[1:28:40]

*Could you say something of the – of meetings with American female scientists at McMurdo and I know that you made a trip to the Scott base which would have contained New Zealand and Australian females?*

Mostly New Zealand’s.

*New Zealand, Australian scientists including the lady who gave you the badge which you then displayed, if you could talk about reactions to you as a British – presumably they – they wouldn’t have seen many if any British women?*

No, funnily enough there was another Brit female geologist at McMurdo, she was working for the Open University I think doing a res – PhD … I regret to say I’ve forgotten her name, and she had approached BAS apparently about doing fieldwork and they said, ‘No, we don’t allow women in the Antarctic,’ so it must have been, you know, a couple of years before she got there and she said, ‘What are you doing here,’ you know, when she heard a British accent and she said, ‘Where are you from?’ and I said, ‘BAS Cambridge,’ and she said, ‘Well what are you doing here, they don’t let women,’ you know and she was quite cross [laughs] that, you know, here I was and she had been told that they didn’t send women to the Antarctic. So I said, ‘Well I’m here courtesy of the US geological survey.’ I think her name was Fiona Gibbon, that – I think that’s the lady. But she was I think working on the Mount Erebus volcanics so she didn’t travel very far from McMurdo and she had gone by the time I got back to McMurdo from my field camp. So … she was one of the few – there were still very
few females at McMurdo in '84, '85, even though they had started sending women in 1970. It was still a military setup with the Navy running the kitchens and all the support setup. The base commander was a military man and he had a television broadcast every day to everybody, you know, he switched into, you know, all this guff, ‘Ata boys,’ you know, ‘what a fantastic job you’ve been doing,’ [both laugh] so there were not that many females when we went into the – to eat and there were separate messes for the scientists and the officers and the – the support staff … and it was all self-service but you tended to gather in tables with your – your group that you were working with so there wasn’t a great deal of interaction and there were not many places to go and relax other than the canteen. But McMurdo, it was a big sprawling station with lots of outbuildings for support staff, there were dormitories for scientists and … different operations that were sort of just the main running of a – a base but you could walk over the – the hill to an adjacent station which was run by the New Zealanders for Scott base – called Scott base, and that was much more like being on a British base, they were small interconnected huts, well insulated sort of boxes upon boxes and the New Zealanders are much more like the British in their attitude to life and there was a lot of dry humour around, as the Americans can be a bit serious. The New Zealanders still had husky teams at the time so I was pleased to go down and say hello to the team of huskies and Pete had said, ‘Oh well if you go and see the – the huskies they’ll … ,’ now what was it he said, ‘they will – they’ll probably knock you flat because they’re big big dogs,’ but I’d – I’d met them anyway at Rothera and was used to the size of the animals, ‘cause they were out on the spans at Rothera, so I sort of went up and said hello and of course once you say hello to one dog they’re all up and waiting to be petted as we walked down the line. They are big dogs and they put their paws on your shoulders and sort of hurl all over you, you know, [laughs] and have a good cuddle with them. So I didn’t provide the – the lads with the entertainment that they thought they were going to get out of me [laughs] saying hello to the – the dogs. But we went into the – the base and they had a bar, they didn’t encourage too many people from McMurdo to – to go there otherwise it’d have been swamped ‘cause it was a small room, but I think we had a social evening there at least once and they had a little shop and Pete already knew that there were these little embroidered patches that you could put on anoraks and your knapsacks and things like that and he had seen that there was one amongst the postcards and it was … oh gosh I’ve forgotten what the word is [laughs], [inaud] … hmmm …
The one that you've showed me is ‘A woman’s place is in Antarctica.’

Thank you, yes, it’s a little circular badge and it’s got the female gender sign in the middle and then those words, ‘A woman’s place is in Antarctica,’ and he said, ‘You’ve got to have one of these, you know, to take back to BAS and show everybody,’ so I wasn’t in the habit of buying patches but I thought this was one that I really did have to – to buy and I certainly did display it on my office wall when I got back and it was there for the duration of my career [laughs] at BAS ever after [laughs]. But one BAS scientist when he saw it, he said, ‘Well yes I definitely agree, women – the only place for women is in the Antarctica out of earshot,’ [laughs] you know, he was inverting it slightly in its original meaning [laughs], so that was a rather biased opinion [both laugh].

Who was that?

I will not name names [laughs].

[End of Track 7]
Would you be able to comment on the changes in the sort of institutional culture of BAS between 1977, when you joined its Cambridge setup, until the date of your retirement which was –

2000 – December 2002. Hmmm, well it was a great change actually, we had not that many female scientists in – in 1978, but there were a few more women around because of – they were in support situations and we had a librarian and an archivist, eventually, sort of different strings of work that was going on at – in the survey and it was often female appointees because it was Cambridge based and by the time I left there was a good proportion of young female scientists coming in to do work in the Antarctic as a matter of course, they – there was no issue about them not going to the Antarctic, it was just part of their appointment that they would be expected to go. And we also had females working in Halley in this rather locate – remote scientific station and they were certainly there for the summer and then eventually they have now wintered over and I think we’ve had female base commanders, you know, the one person who is in overall management of the – the base on behalf of headquarters in Cambridge, so you know, that’s a tremendous change. I don’t know the situation now but there is … I don’t think, any female in a senior management post on the science divisions because when Liz Morris left it was … I think it was a man who took over her role. So there still is that issue of a bit of a glass ceiling, but with more female scientists coming through the – the ranks so to speak and making their way up hopefully that will change, even if it hasn’t changed now, so we’re sort of 2010 which is eight years on from when I retired and, you know, these things do sort of cascade and I hope it – if it hasn’t happened that it will happen soon.

[02:56]

Do you remember the work of Joe Farman around the time of the ozone hole findings, he – the low results for Argentine Island started to come in I think in around 1982 and his paper came out in 1985, what do you remember of I suppose the – the publicising of those results and the role of BAS in that?
Well it was a bit ironic in a way that the value of those datasets was that they were long term monitoring projects and by that time our five years programme was being pushed forward to become sort of finite projects that could be completed in the five year period that they wouldn’t then renew in a slightly different direction for the next five years and you could keep the – the same people on to do the work and that monitoring and basic surveying work was regarded a bit of a – a no no, so suddenly this project that had been the result of long term monitoring sort of came – became high profile so everybody thought, gosh what a joke, you know, [laughs] here we are trying to stop that sort of thing.  And it has actually had a great deal of scientific benefit because of that project being started so long ago, and I don’t think Joe was a particularly high profile scientist within the organisation because he was on this sort of rather basic routine project that had been going on forever and people rather forgot that he existed as well as it and his team, so I think it was rather in the background before suddenly the – the great results started to come out and – and he was being pursued by the media. Which again was a bit of a joke because, you know, he always had this pipe in his hand and he muttered behind this cloud of smoke and [laughs], you sometimes wondered what he was talking about. And … but he – he didn’t interact with the – the geologists, you know, in – if you hadn’t been on base with him or on a ship going down to the Argentine Islands you probably didn’t know he existed, just saw this guy cycling by puffing a – a pipe and, oh yes that’s Joe [laughs], a fairly amiable character but I didn’t really interact with him very much at all.

*I wonder how [clock chiming] someone like Joe fitted in with the institutional culture of BAS as it became – as I think I’m right in saying, through the ‘80s and ‘90s more and more sort of bureaucratic and – and professional in a way?*

Well I don’t think he fitted in at all. I think that quite a few of us who had been with BAS in the early days pursuing our – our science projects in a less inhibited way than – less structured way than we were being required to do it in the ‘80s and ‘90s was – it was a bit of a trial working under those conditions, and health and safety came into being as well and so instead of using commonsense you were required to think very carefully about what you did and if somebody thought that you shouldn’t be doing it then that was not really what one could do. And there was the environmental impact of … your work as well had to be taken into consideration [laughs], that was another
thing with Joe because, you know, we became a no smoking zone within the offices and so he would have to puff his pipe outside and he – he did essentially seem to have it in his – clenched in his teeth most of the time [laughs] so that must have been a little bit irksome for him. But I think he was a fairly unconventional character so he wouldn’t have fitted into the – the new style of working.

[07:37]

And when – can you sort of date more precisely when and – and say how the new style of working was introduced?

Well I suspect that David Drewry was the – the start of it because he had a – a non-BAS history and so he brought perhaps more American methods into the way of operation and he was working on an international project himself in the early days and he probably wanted us to be working more … on the modern lines than traditional lines, so I suspect that that’s probably when it started. And it – it sort of – it increased – I think there was more influence from the Natural Environment Research Council in how we operated too, and although the funding for work in the Antarctic science was ring fenced as far as NERC was concerned they still liked to have control on how we operated within that ring fenced situation – financial situation. So there were a lot of outside pressures … directing how science was done, universities were also finding it difficult to get funding and so they wanted to have some opportunities to undertake research in the Antarctic using us – the BAS system as a way of getting there, and so that was another pressure on the facilities really that we had and we had to make space for involvement of non-BAS scientists on the ships and the aircraft and getting them to the Antarctic. I mean in many ways it was good because we had fresh insight into problems but there was a perceived right because we were a – a NERC – NERC institution that they had a right to be involved as well, because they worked under the umbrella of NERC too. So there were all these sorts of pressures that were being imposed on us and it meant that we were more and more restricted in how we – we worked.

Restricted in one sense but I wonder is there a link between the kind of opening up of BAS culture to a – an international way of working, was there a link between that and
the – and the inclusion of women into Antarctic science since they seem to be happening at around the same time?

I think it probably all was part of the – the same melting pot, there was a general change, but because there was increased operational flexibility for the Antarctic that meant that … more people from outside came in and they weren’t necessarily males so, you know, the females came in as well from outside and it just all – I suppose in a way it snowballed.

Thank you.

[10:57]

Could you comment on the effect on BAS of increasing public and political concern with climate change?

I – I mean it did make quite a big impact because the media were interested in the subject and we had a press officer who found that, you know, there were quite a lot of demands on their time in answering these questions and I suspect that it was really only then that there was a serious attempt to make scientists more aware of how they should talk to the media and present their science in a way that could be understood by non-scientists and – and also be clear, you know, that they didn’t waffle [laughs], which is always very easy to say don’t waffle and then you do. And also to not be pressured into saying things that the media wanted you to say which were not true in your eyes as a scientist. So it did have a good side to it in that it meant those people who were probably going to be in the media spotlight were given the opportunity to get some training in how to – to deal with those problems. Some people enjoyed the spotlight and others didn’t. But it … it probably was good for us within NERC because we could be given some sort of profile and a reason for existing [laughs] from that – that aspect, from the continued funding. And we had international links as well so that sometimes the Americans were approached to give answers and then, you know, BAS scientists would come along and say, ‘Yes, we’re from the Antarctic Peninsula, we can see this happening,’ which is rather different from where the Americans had been operating so it gave a wider perspective [clears throat].
Were you – was your opinion sought from the press at any point in terms of coastlines?

I usually – I usually avoided it [clears throat]. We had – at that time we were … we didn’t have a mapping unit in – in BAS that the Directorate of Overseas Surveys had been always in the process of being amalgamated into the Ordnance Survey in Southampton as the overseas directorate, so it became – instead of DOS it became OSD at the OS. And they increasingly had staff cuts in the section that had dealt with the Antarctic mapping and eventually all of the survey results and that went – were moved from Southampton to BAS into our archives there, so that was quite useful that we had it all in the one house, including the aerial photography taken in 1955 to ’57. But I think about … the time that – sort of 1985 we – we did have a good collection of satellite images and Charles was – Charles Swithinbank was still in … employment at – at BAS as the head of earth sciences, so he was the remote sensing expert from a satellite image point of view so any enquiries were dealt with by him. After his retirement … it probably would have been Liz Morris who – who dealt with them from the glaciology point of view. And it was only when the mapping unit was set up by David Drewry at BAS that I became involved, I’d had – I had used satellite images for making these topographic maps for the base maps for the geology maps but we did – we had a sort of … only a partial collection of satellite images and it was only later, you know, after the – the mapping unit had been set up that we had a really good collection of – of satellite images taken at intervals so that we could see how the – the ice shelves were changing, the coastline was changing and that’s when we started to become involved in presentations to the media. But one of my colleagues was far better at facing the camera than I was so I usually sloped shoulders on that [laughs].

Who was your colleague?

Paul Cooper. [clears throat]

[18:27]

Could you tell me more about your work as head of the mapping part of BAS?
This was set up in 1989, David Drewry had thought that we should be trying to improve the maps that were available for the – the science programmes and with his background of remote sensing, you know, he felt that it was a bit poor that here we were in the late ‘80s and we didn’t have any decent maps of the Antarctic and Mike being the head of geology and geology being the main users of maps had to forfeit five posts from his geology division to set up the mapping unit and we came up with a name between us of Mapping And Geographic Information Centre, the acronym being MAGIC and it was all about the time when one became involved in digital mapping, getting everything digitised so, you know, you could produce a map by magic really [laughs], that was the – the theory behind it. And Phil Marsh was … the person along with me who helped to – to setup the – the unit, we had – so there were the two of us and we needed four other people to help fill the – the centre. And he and I worked together in – in sort of devising what skills we needed from people and we interviewed them … and we had – there were four post – four posts but – four people but three posts so two of them had to be part-time, which made it more difficult to actually fill them ‘cause the pay wasn’t that good, they were sort of junior members of staff. And we had a – somebody to compile topographic maps, somebody compiled geological maps, we had a map curator … and then there was Phil who was going to be the geology database manager and I was to sort of look over all the map compilation, so I would be the manager of mapping. I’ve forgotten somebody … that’s only five and there were six … hmmm, it will come. The first people took up their appointment in the autumn of 1989 and I think we had everybody in – in place by the … spring of 1990, just about the time that Phil decided that he didn’t really want to stay at BAS any longer so we had to … find somebody to fill his – his place. So he was going to be the GIS, or the Geographic Information Systems manager, as well as the geology database manager, incorporating the two roles, and we advertised and people applied and one of the people was somebody who had worked with David Drewry at the Scott Polar Research Institute in Cambridge before he’d come to BAS to work in the glaciology unit and he had a lot of experience with remote sensing data, interpreting it, and using computers, and that was Paul Cooper, so he was appointed as the GIS manager at the same grade as I was. But eventually it – David Drewry decided that there should be just one person in – in charge of the – the mapping MAGIC and so he asked me to become the head of MAGIC and Paul, who had been
working to Mike, came to work for me – with me and sort of under my management. And about that time we had been asked to participate in an international project of creating the first digital map of Antarctica by digitising all the paper maps that existed from all around the world of the Antarctic, and it was a project that was funded externally by – it … it was managed by the World … Monitoring Centre [World Conservation Monitoring Centre] in Cambridge but funded by one of the oil companies, BP [laughs], thank you, I just suddenly got the – the – the logo in my eye. So they – they … came up with this funding and they didn’t want to have any … item that they could sell at the end of it, they – it was done sort of altruistically but they’d get a good profile for being environmentally friendly so to speak. And the World Monitoring Centre [World Conservation Monitoring Centre] wanted to have a map so that they could monitor animals in the Antarctic and whether they were endangered or not, so they had this sort of environmental aspect as well. I by then had been nominated as the UK member of the SCAR working group on geology – geodesy and cartography and I was asked to – I said I thought that SCAR members should be involved and this – this should be something that was publicly available and they said, ‘Okay, you ask the – the SCAR working group whether they’ll participate,’ so at my first meeting in Germany of this group of men I stood up and said that we had this project that we were going forward with and it would be very nice if we could digitise all of their maps, if they had them in digital form could we have them, but if they hadn’t did we have their permission to digitise them. So a few countries did have some digital data and others said they would digitise their maps and let us have the data and others said you can use our paper maps and digitise them. So that was – I was amazed that they accepted the proposal without a squeak really. But it took – that was in 1990 so it would be the – the summer – my first summer as – with the – the group – the MAGIC group and we had a two year time limit on digitising about 200 maps in total and updating them using satellite imagery, and Charles Swithinbank was involved in that project too and he oversaw all the interpretations of satellite image to improve the coastline, bring it up to date from the – the published maps which was no mean feat. And we did finally produce a CD in 1992 on behalf of SCAR and then we became the – the managers of the database and Paul did all the – the sort of making the – the whole of the – the database coherent along with a – a young man at the – the World Monitoring Centre [World Conservation Monitoring Centre] in Cambridge. So the – everybody put a great deal of effort into bringing this to fruition and we brought
out various updates over the years just to improve the access and it became available on the web rather than a CD, which meant that it could be updated much more readily. But this was very good for MAGIC because it put us sort of high profile within BAS that we had done this thing, but it was then another story to get some of the different science groups to actually use the digital data as the basis for any maps that they were producing, even the upper atmosphere physicist needed to have maps of the Antarctic to show their models of – of data on – and goodness knows where they got them from but they were often pretty awful and we finally educated them but it took a long time [laughs] to get them to incorporate the new data into their software programmes. So … as much as possible I tried to incorporate all of the staff in MAGIC within this – this programme so that they all felt they had ownership of it in some way. But it then helped us to regenerate maps very quickly and we – we instituted a dial a map service so that scientists could come along and – and – a bit like the map that we have on our kitchen wall here focused on Thornton Rust in Wensleydale we could generate maps of the Antarctic Peninsula focused on their particular area of research and give them a paper copy or a digital copy, so they could work with it on their computers if they needed to. And meanwhile we were also generating much higher quality maps of detailed areas as part of our main mapping programme and Adrian Fox was our map compiler, came straight from university having got a geography degree but done a lot with aerial photography and he went and collected … data the first season that we had access to a – an aircraft and a camera which we borrowed from the Hydrographic Office. I’ve just remembered that the sixth person was a surveyor and he came along a bit later, he was on secondment from the Ordnance Survey and he was there to digitise all of the survey records that we held from the Directorate of Overseas Surveys and collect new data because we had GPS receivers by then, so we bought a few small handheld GPS receivers and these were taken around at – with the aircraft when we took aerial photography, so we were trying to move slowly into the modern age of mapping using remote sensing techniques as opposed to the old system of over snow traverses. There was quite a – a lot to – to sort of take onboard and get people up to speed, but by the time I left, I mean we were generating very high quality maps, doing all of our compilation and colour production separates within BAS digitally and just getting final copy printed by a professional cartographic printer if we wanted a run of 500 or 1,000, and it was nice that science divisions came to us and said, ‘We want to produce a map of the Antarctic,’ and the geophysicists and the glaciologists both
came and wanted to do separate maps … and they used us to interpret the – put their interpreted data onto a map of the Antarctic and both of these were international projects so, you know, we got quite a bit of kudos out of that too for having printed a high quality map at the end which was internationally owned in a way.

[29:31]

What was involved practically in – in the early stages where you were digitising maps which were coming not only from British sources but from – I know from Germany through the – the SCAR group, maps of all different scales, different sort of legends and – and symbols and so on, I can see that you might lay them on a scanner and turn them into something that’s digital, but how do you get from there, loads of different kinds of maps scanned into a computer, to something as coherent as a – a database, a sort of standardised map?

Well firstly we couldn’t scan the maps, they were too large and of variable quality, and the symbology was okay because there was the SCAR working group on geodesy and cartography had agreed in 1960 a standard set of scales and symbols that were used on topographic maps, so there was some coherence there. But most of the maps, they just weren’t appropriate for scanning, so they all had to be hand digitised and there were two people digitising every single line on each of the sheets of topographic maps … at different scales. The American ones were at 250,000 scale, some of the Australian ones were at one to a 1,000,000, all the satellite images that were one to 1,000,000 scale which Charles had then interpreted with line drawing overlays which had to be digitised. There were some of the old British one to 200,000 sheets still in places that we hadn’t covered by the geological base map compilations … and the Chinese and the Japanese had some very detailed maps and sort of small scale. So they all were digitised by hand and then I checked them with a … cartographers have a little lens on a stand so that if you bend over a map with this you can see whether the line is following the underlying original map or not and I would spend hours bending over a light table correcting and marking up these and then sending them back to the digitisers who were based at the World Monitoring Centre in Cambridge, and they would throw up their hands in horror and say, ‘Good grief, how does she expect us to digitise that,’ but in fact they – they were marvellous, they – they went
back and re-digitised bits and then of course I had to check them that what they had
re-digitised still was coherent with what they’d digitised before, and there were places
where there were no contours and we had to interpret the contours once they’d
digitised those and then the – the little gaps had to be digitised again, so it was a very
on process actually, a lot of rigorous work went on but I maintained that a database
was only as good as the data that was put into it and if we wanted to produce
something that everybody would use it had to be reliable and as precise as we could
make it. The accuracy was another thing because a lot of the maps were sketch maps
anyway and sort of somebody’s interpretation of what they thought the contours
should be like when interpreting from an – an aerial photograph or a satellite image,
so they weren’t – there were not that many survey data points where you knew the
exact altitude of somewhere, so a lot of it was interpretation so the accuracy was
minimal really but we had – because they were published maps we had to be as
precise as we could in interpreting those maps. And we don’t – wrote a manual at the
end of it and this was pointed out, you know, how much was real data and we had a
mosaic map showing what was based on maps at one scale and what was based on
maps at another and where it had been reinterpreted using modern satellite imagery,
so people had a sort of health warning on the – the range of products that had been
used, so it was quite a massive undertaking actually.

Was it then a case in some places of precisely digitising something that wasn’t itself
accurate?

Yes, hmmm.

Yes. But that was explained?

Exactly so, yes, yes.

I see.

It was better than nothing [laughs].
Yes.

[34:29]

In terms of the political and popular interest in climate change, I – I guess, I might be wrong but I guess are we looking at coastal change and increases in areas of bare rock relative to past –

Yes, it’s mostly coastal change because there is such a small percentage of exposed rock in the Antarctic anyway and one of the – the good things about having this database was that Paul and his computer chums could generate facts from the – the database and we worked out that I think it was .35 percent of the Antarctic continent was exposed rock, so that’s a very small amount, but when you see a map of the Antarctic at perhaps one to ten million, of course all the rock outcrops have to be exaggerated in size just to show that they exist, so one gets a rather false impression, but when you’ve got a – a digitised database based on one to 250,000 scale maps in places and they’re usually where there’s most rock exposure because they’re the – the mountainous areas where people visit. You – you can calculate what the exact area is and each time we’ve published a new edition based on more accurate data then of course that figure has reduced in size, so it is still .3 as the first figure but it might be down to .31 or something [laughs] percent. So that’s the exposure but it is the – the coastline [clock chiming] … it’s how the – the ice shelves have retreated and how some of the glaciers that fall directly into the sea have – have calved back over the – the years.

[36:40]

And in a way this project led onto another that the US Geological Survey had been doing, or trying to do for a number of years, and that was create a set of maps showing coastal change in the Antarctic, of which Charles Swithinbank had been involved with, again through his interpretation of satellite imagery and his colleagues were mainly Jane Ferrigno and Richie Williams, who were both US Geological Survey people, one at Washington and one at Woods Hole. And … this was – this project was presented to the SCAR working group on geodesy and cartography as a –
which then became geodesy and geographical information as a – a project that could be adopted by the SCAR working group as their next sort of enterprise and they were working around the coast of the Ant – Antarctic continent from Marie Bird Land, which was one of the areas the Americans worked in, round towards McMurdo, away from the Antarctic Peninsula and they were just using satellite images to record changes. And I suggested that in the Antarctic Peninsula we had a – aerial photographs going back to the 1950s for a good coverage of the northern part of the Antarctic Peninsula and this would bring a bit more historical evidence to light, and I talked with Jane Ferrigno at another of these Antarctic geology conferences, this time in Wellington, New Zealand and suggested that she might like to get our help in this way but that I didn’t have enough staff to deal with it and if she could find her way to fund an additional person working in Cambridge then, you know, we’d be very happy to participate, which duly happened and we had a … a young lass who had actually applied to BAS the previous year to become a … a worker with Adrian Fox making topographic maps and we had appointed somebody else in her place at the time ‘cause we felt she needed a little bit more skills training, but when that post came up we thought of her and – and she heard about it anyway and she applied and she got the post and she was a very thorough investigator. Her name was Alison Cook and she worked with Adrian Fox on this project until the funding came to an end in 2002, in my final year at BAS, and at that time the person who had been helping Adrian left and so the post was advertised again so she moved from being on this project for the USGS to being a full-time BAS employee and going to the Antarctic, so having spent three years looking at sort of satellite images [laughs] and aerial photographs she got the chance to see it for real, so that was good. But Jane Ferrigno was responsible for getting all these maps through publication and that was three sheets that covered the entire Antarctic Peninsula and we came up with some very interesting results, well Alison did with all her interpretation and there were places where there had been quite a lot of reduction in the ice shelves, but there were places where they also had increased, so it was a bit of a shuffle backwards and forwards sometimes over the decades.

[41:10]
But it was about 2000 that we started to see quite significant changes in the ice shelves in that ones that had been retreating over the previous decade, with quite big losses at the – the ice fronts, had got to the situation where they were pretty unstable and there would a sudden collapse of the entire ice shelf, so there was some fairly dramatic imagery involved in that, you could see all these big floating icebergs and floating out to sea where they’d – the ice shelf had disintegrated. So that was all happening about the time that these maps were being finalised, so we were able to incorporate those data in the final map sheets, the last of which came out earlier this year.

And how are those made public or – ?

It’s part of a US Geological Survey miscellaneous map sheet series and it’s called Coastal Change – Glaciological and Coastal Change Maps of Antarctica and I think there’s about sixteen sheets that cover the whole continent, probably six have been published now, but Jane has retired, I have retired, Alison is no longer available, well we finished the – the Antarctic Peninsula so our commitment has been completed anyway from the UK point of view. And whether the USGS would be able to continue working on them I don’t know.

How – are you aware of how those images have been sort of picked up by popular interest in –

Not really, no, no, not since I left BAS.

Yes, okay thank you.

[43:02]

I know that at some stage at BAS there were open days which I think were designed to demonstrate to the public the work of BAS?

Hmmm.
Could you say when they started and –?

Well I think the first one actually was when the new BAS building was opened in Cambridge in 1976, because the Duke of Edinburgh came to do the official opening and a number of displays were put on and after the Duke had gone then the public were invited to – or probably the relatives of scientists working at the – at the headquarters … came to have a look … and I think that there was such a good response that when was the next one? There was a lot of work involved and people used to groan whenever the director mentioned [laughs] having another open day. I know there was one in ’86 I think but I am sure that there must have been an intervening one, in fact yes there was, it was not long after I had … started doing the geological maps in the late ‘70s and I had to stand around hoping that somebody would be interested enough in a geological map to stop and ask questions. I didn’t particularly enjoy the experience of standing around waiting for somebody to [laughs] ask questions. But you know one had to if you wanted your science to be on display so I did and we certainly had one in – in ’86 and then there was another in ’89 when the extension was opened, again by the Duke of Edinburgh. They … they probably were every four or five years or something, but we also had one on the Bransfield in the Pool of London and that would have been in ’85 … ’86, yes, that would have been the one in ’86, that’s right, because I had been on the Bransfield that year so I knew quite a lot of the – the officers so it was – that was good fun going down there and sort of renewing acquaintance with the – the ship’s crew and we had displays up in the ship’s hold of the sort of work that we had … including a tent, you know, where people could crawl in and out of the tent, and it was quite nice ‘cause my brother came down to have a look at what was going on, you know, ‘cause he worked in – in London so it wasn’t a – a great trek for him, and then my sister and her husband came down from the Cotswolds to have a quick gawp on the ship [laughs] so that was – that was nice. So that was the only one that we had on the ship and all the others were at the headquarters in Cambridge.

[46:31]
Do you know – can you remember what a – how you attempted to present geological mapping as – of – you know, of sort of a popular lay interest, how you managed to sort of – attempted to make an exciting display for a popular audience?

I think it was based on satellite images that people could have a look at, a sort of before and after, because one of the – the map sheets that we did was of Alexander Island which is a very large island, I think one of the nicest maps because it’s an entity, you know, an island is a bit more intriguing than just a – a long sheet of a peninsular, strip of a peninsular going across a sheet of paper, and we did have quite a few satellite images that had been taken before one of the ice shelves had started to … retreat and then after, so that people could see how the coastline was changing and it – it showed the topographic effects of the change but then we had the overlays of the geological fieldwork, and I think we probably had photographs of geologists working – knocking rocks off, you know, and being – camping in – in the deep field to provide a bit of interest, just so they had a – a feel for how the data were collected and then what was done with them at the end.

Which one was this, the one where you showing the satellite images of this –

This was Alexander Island and it where the ice shelf that was beginning to show signs of disintegration, and also George the VI Sound is covered by an ice shelf, George the VI ice shelf, and that is the stretch of water that separates Alexander Island from western Palmer Land, so it’s a very long ice shelf and that was beginning to retreat at the northern end at that time. So we had images both of Wordie ice shelf, which was in Palmer Land coastline, and the northern end of the – the George the VI ice shelf were beginning to change.

Which open day was this, which date?

That would have been in … ’78 or ’79 I would think.

Hmmm …
So that would have been the first public event at which you could have shown dramatic coastline change in that way?

Hmmm.

Thank you.

[49:37]

Could you tell me about the filming for The White Laboratory film, when and why and your involvement?

I actually had expunged all memory of that film [laughs] until you mentioned it. There were often camera crews around at BAS about the time that climate change was being discussed in the media, and usually it was glaciologists who were being asked for their opinions and I think we were, in the mapping group, were sort of drawn in because we had the collection of images that – satellite images that showed this and – and more detailed aerial photography had been collected probably by then. I can’t exactly remember the date of the – the film … except that it would have been pre [pause] pre … hmmm, it was either ’97 or ’99, I’m trying to think when we moved offices but it was in my old office and we moved over to the other side of the building in due course. And I think that … hmmm, I can’t remember whether it was ’97 or ’99 so it would, you know, be mid ‘90s probably that we had that filming. I know that I was asked probably how we monitored changes in the – in the coastline using satellite imagery but I – I really can’t remember a great deal more than that [laughs], except that I disliked the whole experience of sitting in front of a camera and being interrogated.

Do you – are you able to say what about it you disliked in particular?
Hmmm, well I had never liked to be on a stage [laughs], I was the focus of attention and I had these arc lights at me, it was quite a warm day and I just felt uncomfortable, I hadn’t really had any experience of – of doing that sort of thing before.

Were there BAS scientists of the time who liked that sense of being on public show, of performing and –

Well my colleague Paul Cooper was much more at ease, he could talk at end about remote sensing and computers and things like that, so – and he was a lay preacher so he was used to standing up in front of people and talking, the difficulty was shutting him up sometimes [laughs].

Hmmm. I wonder whether there were other people at BAS for whom the role of a kind of public scientist was a welcome one?

Hmmm … I think – well certainly David Vaughan who was one of the glaciologists became quite a prominent person talking about changes in the ice cover and there were people who had worked with Joe Farman on the climate side who would be talking, there was Brian Gardner and –

Jonathon Shanklin?

Jonathon Shanklin, I could remember the Jonathon and I couldn’t remember the surname [laughs] so they too were quite often being asked by the media to give interviews.

Do you remember Joseph Farman’s feelings about his new sort of public role?

Not really.

Yeah.

No.
Thank you.

[53:50]

What I’d like you to do now if that’s okay is to summarise your sort of activities post retirement involving the move here and your voluntary work and so on?

Yes, we decided that we wanted to move away from – from Cambridge because the little village that we had lived in there was becoming overwhelmed by traffic and developments in adjacent villages and it was no longer the quiet bolthole that we had found when we first moved there, and we had felt this for some years before we were due to retire and we decided that North Yorkshire was far enough away from Cambridge to be isolated enough from all this sort of development. We’d been taking holidays in the area and we decided to start looking for a potential home in 1999 when I came back from my last trip from the Antarctic, and we came up here for a long weekend and one of the first houses we looked at we fancied and decided that we would not find another place like it, it had enough grounds around the building and it was a – a large roomed house, it didn’t have as many rooms as we had where we were in Boxworth because the house had evolved around us, we’d extended it twice in – in Boxworth. But we loved the – the roomy atmosphere inside and the natural pitch pine woodwork that there was and so we decided to go for it and that was three years before we retired. We came up here periodically probably every six weeks or so to sort of keep an eye on the place and participated as much as possible in whatever village events were going on because we had selected a house in a village that was much the same size as Boxworth, in fact the – about fifty houses in – in Thornton Rust. So we got to know the people before we actually moved here permanently in January 2003. Mike had already volunteered to be a member of the village country show committee before we actually moved here, he’s now the chairman, and this is an annual event where everybody puts their baking and their jams and their garden produce on display and flower arrangements and things like that, and we have judges from outside the village who come in, so it’s a general bun fight actually [both laugh] once a year. And we … I got involved in the entertainments committee, because a Dales way of life is to make your own entertainment and they’re used as fundraising activities for helping to maintain the village institute which is the only public meeting
place we have in Thornton Rust, there’s no church, there’s no shop, there used to be a village shop operating opposite our house, stone house, but that closed about two weeks after we first took possession of the – the house in October 1999, so there are no other facilities. There is a small chapel that is an outlier of Aysgarth Parish Church which is the big parish church two miles away, and we suddenly found that we were getting involved in helping to renovate that and so during 2005, 2006 every Monday evening we spent two hours inside this village chapel taking off the plaster and building – well re-pointing the entire inside of the building and painting it and Mike did a lot of woodwork, renovating that. But it was good fun because at the end of the evening we used to have what we referred to as cocoa, which was actually wine, and nibbles and there were six of us that did that, varying skills but we all put our hearts into it and it took about – well from when we started in August 2005 until November 2006 to complete the work. But it’s now a very comfortable and cosy little room and services are held there once a month and we also have a harvest service, a harvest festival, and then there’s a Christmas carol, candlelit carol service and it’s very nice, you can hold – it can hold twenty-four people, it’s lucky if it gets five or six per service but it’s just, you know, it’s a community centre again and you can hire it for small meetings if you wish rather than the village institute. So that was one thing that we got in – involved with, there’s – I mean involved on the Kennel Field’s Trust which a publicly owned field up behind our own house which used to house the kennels for the – the local Wensleydale hounds before they were disbanded, but it’s now a nature reserve, it has a couple of barns which were restored and we just help to maintain it really. But we celebrated ten years of that becoming into the village by having a picnic last June on one of the sunny hot days and about forty people from the village came up and we had a sort of bring and share picnic, which was very nice. We also got involved, both of us, in the Dales Countryside Museum in Hawes which is about seven, eight miles from here and they used to have – ask for volunteers to go and help label specimens of Dales life, like hay sweeps and shawls and mittens and gaiters and anything to do with country life in the Dales over the last century probably. And I got more and more involved with that whilst Mike got more and more involved in another project in helping to set up the restoration of a Victorian water powered mill in Gayle which is a small village adjacent to Hawes, so we both do quite a lot of voluntary activity like that. And I’m also … involved in a – an upper Wensleydale community newsletter which comes out once a month and is a way of
communicating information, what has happened or what is about to happen within the Dales and it’s distributed quite widely in the side dales of Wensleydale and I’m the treasurer of that and it’s funded by local firms advertising in it, and we’re a charity and we give grants out to various schools and choral societies and whatever, to distribute the – the funds amongst the community each year, so it’s a – a varying scale of grants that we make but we also give a 150 pound bursary to any student from Wensleydale who goes up to university or further education that needs funding for equipment. So quite a wide range of activities and we still garden and we’re still trying to renovate our own home [both laugh].

Thank you.

[1:02:26]

*I know that you have an archive at BAS which contains scientific reports and maps and data and that sort of thing, but I wondered whether you could quantify and give us a sense of the content of your sort of personal archive of – that cover – covering your sort of scientific career?*

Well I have a – a collection of – of slides that I took in the Antarctic over the … the several times that I went, ‘cause you can’t help to fail and click your camera [laughs], the scenery is so beautiful, but I also used it to record the different types of equipment that were being used in the various projects. I kept diaries of what happened each day, not – I think it was for the – the early expeditions when it was all very novel, my last two trips were in ’98 and ’99 and I don’t think I was into the mode of recording things quite as well then [laughs]. So those are the main sort of sources of – of information, sort of photographs. I have – I mean both Mike and I have features named after us in the Antarctic, so we have sort of records of those, pictures of the – the features that have been allocated to us. I’m not – can’t think of sort of other ways of personal archive really.

*And have you thought about what you’re going to do – where you’re going to put those things?*
No, I left as much as I could behind at – at BAS. And Jo Rae was sort of boggling at the number of files that I was handing over to her [laughs] and I said, ‘Well somebody might want to know how we did the – these map compilations and the projects,’ the international projects that I was involved with, not only the database, topographic database, but I also participated a lot in the development of the Composite Gazetteer of Antarctica, which the Italians ran but … I helped a lot with that and I had hoped to continue working with that when I came up here but the … computer access was a bit too iffy at the time to be able to deal with that. Hmmm … I don’t know that … BAS would be interested in any of the slide collections because they’ve got such a good collection themselves of different aspects of work, so I don’t know really.

*And the diaries, what do you think?*

I think probably they would go to family.

[1:05:51]

*Could I ask you to comment on how you felt about the process of being interviewed for National Life Stories [clock chiming], you can pause to think before you answer if you like.*

[Laughs] I wasn’t sure what to expect really. I sort of – because it was a life history that was being required I – it sort of made me think back about the early period, but I wasn’t – I didn’t really know what viewpoint you would be taking on this, quite how you would approach it, so I hadn’t expected perhaps quite so much detail questioning about early childhood and, you know, the houses that I’d lived in, I sort of thought, hmmm hmm, am I really expected to remember that far back [laughs]. And of course it’s – it’s sort of talking at length to a complete stranger and you’re not quite sure about that, but you’ve been very good, I haven’t felt inhibited in any way [laughs] so that – that’s been a pleasure actually.

*Good, I’m glad.*

[1:07:03]
And just to finish I think it’d be nice for you to tell us the features in Antarctica that are named after you?

Hmmm … there is a mountain that I climbed with Pete Rowley in the middle of Palmer Land, it was one of those occasions he – he and I share the same birthday the same year so we’re sort of twins in that respect, and he is a pretty [inaud] bloke at times and since I also used to be extremely obstinate and wouldn’t give in I could sympathise with that but it – he did sometimes take it to extremes. And we had camped in a place that was called Happy Valley but in fact we were shrouded in cloud in – in white out for a couple of days and he was getting cabin fever, he just wanted out, he wanted to be tramping around and … all the other chaps said, ‘Don’t be stupid, you know, you can’t go out in this,’ and he said – in the end he said, ‘I’m going,’ and I said, ‘You can’t go, you’ve got to have somebody with you,’ and the others wouldn’t go so I went, and it did clear a little bit so we could see our way from the tent to the first ridge and we went up and the cloud was up and down all the time. Anyway at the end of the – the day we – we got back safely and the weather improved the next day so we could continue our – our mapping project. But at the end of the season the Americans have this idea that anybody who has worked in the Antarctic should have a feature named after them and he thought it appropriate that this peak should become Mount Thomson or Thomson Peak or something, but Thomson is quite a – a common name and there were various New Zealanders with that name who had had features named after them already, so there was a Mount Thomson and there was a Thomson Peak, so in the end it was called Thomson Summit, and it was nice because I had been there so I knew that. Because Mike had had a feature named after him many years before and that was Thomson Rock and it was a – an igneous rock and he’d never even been every near it and here was this palaeontologist [laughs] who had that feature named after him. And then at the conclusion of the – the mapping project just before I retired that I’d done with Jane Ferrigno, the third sheet which covered Palmer Land, again part of the area where I had worked with Pete Rowley in fact, and they wanted to put a few features on unnamed glaciers and ice … streams and things like that and so Adrian Fox and Alison Cook and I had features named after us on that one sheet, so there is a – I think it’s a Thomson Glacier named after me, so there are a couple of features for me and one for Mike, which are very nice.
[End of Track 8]

[End of Interview]