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INTERVIEW WITH BARBARA KIDMAN

Recorded by Rob Linn on 14th November 2005

DISK 1

This is an interview with Dr Barbara Kidman for the University of Adelaide Oral History Project on 14th November 2005, interviewer Rob Linn. This is session 1.

Barbara, you were born in 1927. Can you tell me a little bit about your parents, please?

Yes. My father was at that time a station manager. We lived on a sheep station called Oakden Hills, which is up near Woomera. He came from a country family, many of whom were bushmen, I would say. My father in his younger years was a bushman who worked for his uncle, and then after the First World War he and his brothers purchased Oakden Hills Station. My mother was a nurse, whose forbears also had been bush people, but she'd grown up in Adelaide and, because her parents died when she was young, she had to earn a living so she followed her older sisters' advice and took up nursing, was trained at the Royal Adelaide Hospital. And she met my father at Kapunda. My father's family home was at Kapunda and his sister, Jean, was nursing at the Kapunda Hospital; after my mother finished her training she worked there and so she met Jean Kidman and hence my father.

Your father was Thomas?

Thomas Kidman.

And he was a nephew of Sir Sidney.

Nephew of Sir Sidney Kidman.

And your mother's Christian name, Barbara?

My mother's Christian name was Leticia. Neither of them had middle names, which is rather curious, and she was always called 'Lettie'.

And she'd been a Conway, is that correct?

Conway was her maiden name. And her father, Archibald Conway, was a pioneer. He came out to Adelaide from Ireland because his sister was married to a man who had a property to the south of Adelaide, and that family are buried in the St Mary's Church cemetery. And my mother's mother was the – Fanny Burt, Frances Burt, and her father had come out to South

Australia in 1839, and he was not a prominent but a fairly prominent Adelaide citizen of the day.

That was Adam George Burt?

Adam George Burt.

He'd been a surveyor, is that right?

Yes, he was a surveyor on the overland telegraph, and we suspect that that was how the Conways came in contact with them, because Archibald Conway was the manager of Peake Station, which is in the North of South Australia, at the time the overland telegraph went through, and the South Australian headquarters of the overland telegraph construction party were at Peake Station.

There are various geographical features around Alice Springs that have been named after both Archibald Conway and Adam George Burt. There's Burt Springs, Burt Bluff and there's a Mount Conway in the Western MacDonnell Ranges.

So your mother, being a nurse, had gone into a career which wasn't what many young women did at the time.

Not many, but there were women who did nursing, yes. Yes, that was unusual and I feel it had a subtle effect on me because she loved her job as a nurse and of course had to give it up when she married but had very happy memories of her time as a nurse.

Barbara, what are your earliest memories of living at Oakden Hills?

Well, I can remember the house and the people who worked there. There were lots of men working there. I can remember lots of incidents there. We had a rather unusual family life because we lived in a small house that didn't have a kitchen and our meals were brought up to us from the main kitchen on a tray. There was a cook employed who cooked both for us and for the men who worked at the station. It was called a 'married couple'. They had a man whose job was to milk the cow and kill the sheep or whatever, for meat, and do various odd jobs, any gardening that was done, grow some vegetables; and his wife did the cooking, with his assistance. Made bread once a week, I think, so we only had fresh bread once a week.

Was it beautiful country out there?

I love it. I've been back a number of times. It's fairly flat bush country, very, very dry. I mean, you don't get beautiful scenery. But the bush itself I think is very beautiful.

Did your mother and father consider education an important part of your life?

Yes, they did. I have to give them credit for that. My brother and I had correspondence school lessons and we received the lessons by post once a week on the tea and sugar train and sent off our work once a week, the following week. And my parents supervised us. Both of them really had only had primary education, but I think primary education involved more than it does now. Of course, my mother was a trained nurse. But they were both very well-read people, and they had no difficulty teaching us to the stage – I went to, till I was ten I had correspondence school lessons, and we were well ahead with our academic work when we went to school.

Your brother is ---?

Peter. And he went on the land, too, and he is a successful businessman, I would say.

Is he younger than you or older?

A year younger than I am.

So after this pretty successful correspondence school system, what happens to your schooling after that?

Well, we left Oakden Hills, partly because of our education because my parents believed that we had to go to school and they didn't want us to leave home. And the Oakden Hills was sold and my father looked for another property because that was the way he had to earn his living, and we were itinerant for about a year and I went to school at Henley Beach School for a few months and also at a school near Cowell, and at Port Augusta School – first we went to Port Augusta School.

And after that does the family settle at Port Lincoln?

Yes, we settled at Port Lincoln.

What school did you attend there?

I attended a small, one-teacher school, North Shields School, which had about twenty children there, and I went to that school for two years. I think there were all seven grades in the one room and the teachers were very, very good, particularly the teacher I had in the second year. He managed it all terribly well and he taught lots of extracurricular activities besides the sums and English spelling and English and so on, he taught everything. I thought he was a fantastic teacher.

What was his name, do you remember?

His name is Rex Williams. I do, I still know him. And he actually influenced me a lot because he encouraged me to be ambitious.

In a scholastic sense?

In a scholastic sense, mm. And he set my sights higher than they had been. Definitely. It was very difficult, because we were in this little school and of course at the end of that year I had to do the QC^1 , the qualifying exam, and to do that we had to go in to Port Lincoln, which was five miles away – not very far by present-day standards, but it was quite an ordeal for a child of twelve to have to go and do an exam in a strange school. Seemed a bit unfair to me, but – – . (laughter) But anyway, I did. I did it, and got through the QC, won a scholarship and went to Port Lincoln High School after that.

And the scholarship was for ---?

I think it paid – you know, there were fees at high school in those days, and I think it probably paid the fees and gave a living allowance of some sort – I can't be sure of the details – for three years, I think.

So your family were living out North Shields way?

Yes, we were living five miles north of Port Lincoln, one and a half miles south of North Shields, and all of these places are on Boston Bay, so our farm property was in the most beautiful location with the most beautiful view over the harbour, and it was a very, very beautiful property and the hills behind were lovely, and we had a private beach, virtually.

So Port Lincoln High School, did that continue the high quality of education you'd experienced at North Shields?

It was mixed. It was mixed. On the whole, I think the teaching was very good, very good, and certainly the science teaching was very good. I was very lucky again, because the headmaster of the high school at that time was a man called Simmons, who I think is well-known in the Education Department, and he – for the very first time, he allowed girls to do Physics and Chemistry, so in my second year I was able to do Physics and Chemistry, which hadn't been permitted up until then. And so I got into the solid science stream and excellent teachers – they were all men, but very, very good Maths, Physics and Chemistry teaching.

Mr Simmons is very well-known.

Yes.

He was – I think today they'd probably call him one of the 'super-heads', or whatever the term is.

Well, he was willing to try new things, I think, and he was very good to me and to some of my co-students at the school.

Was it a large school, Barbara?

Fairly large. I can't tell you the number, but I think it was. And I think the standards were pretty high. It was mixed, of course. There weren't very many of the students who were academically ambitious, but there were some, which was good. And as a matter of fact, I was there for three years and I still have a friend that I made at that school. Our lives have diverged, but she lives in Sydney and we see each other at least once a year, I'd say, and we've remained friends all our lives, so that's quite amazing, really.

That is, isn't it.

Yes.

So after those three years you come to Adelaide, to Walford?

That's right, yes.

And why were you sent to Walford? Was that to prepare you for university, or what?

Not really, because technically I was able to go to the University after my three years at Port Lincoln because I'd done [an] accelerated course there. In my second year, I sat for the Intermediate exam, they gave me the opportunity and I thought, 'Oh, well, I might as well sit for the exam', and I did sufficiently well for me to be moved up to the Leaving. And at that stage the Leaving was the matriculation, so technically I could have gone to the University. But I don't think my parents thought I was mature enough, and my mother very much wanted me to go to – she chose Walford because a great friend of hers had sent her daughters to Walford and she thought it would help socially, I think, to go to Walford.

In those days, was Walford House in the same location as it is today?

Yes, it was.

¹ QC – Qualifying Certificate.

But it was pretty much the two-storey building, was it?

Well, that was the boarding house. There were school rooms and there was a hall there. I think they've built a much bigger hall now. None of the teaching was done in the two-storey building.

That was in the single-storey house, was it?

No, the teaching was done in -

Oh, in the classrooms.

in classrooms.

No, I'm sorry, I'm with it now.

Yes.

So, Barbara, but your education there was mixed, also?

It was mixed. I mean, actually, the Maths teaching was not good, because I was doing Leaving Honours, and the Maths teaching was not good. The Chemistry, we had practical in at the School of Mines and that really saved me because that was very good teaching and I did Physics in at the School of Mines, that was very good teaching. But the Maths and the Chemistry classes were very poor. English was excellent and Botany was very, very good, they were very good teachers. So it was mixed.

Now, the subjects you did at the Adelaide Technical High School were to form the basis of your future study, is that right?

Yes. I'm not sure whether it was Adelaide Technical High School, I'm not sure what the arrangement was, whether it was actually School of Mines or Adelaide Tech. I'm not even sure that Adelaide Tech did Leaving Honours, did they? I don't know, I'm not sure. But all I know is that it was arranged from the school.

The Chemistry practical, there weren't many girls going to that class; but the Physics was done for girls from independent schools, and so there were girls from all the main independent schools in Adelaide were combined in one class and taught Physics.

How large was the class, Barbara?

I would have said twenty or so. We did the practical and the ---. They were lecture-style teaching, too, it was lecture-style teaching.

Now, how did you go in the Leaving Honours examinations?

I did quite well. I got a high credit in Physics. I don't think I got a credit in Chemistry. And I got a high credit in Botany.

So that gave you the ability to go to tertiary education?

Oh, well, yes. I already had the ability because I'd matriculated; but I guess it gave me more confidence.

Now, what led you towards the Bachelor of Science? Was that just your interests?

I think it was. I was torn between Science and Medicine and, as a matter of fact, there was some family pressure on me to do Medicine – not so much from my parents but from an uncle. But in the end I decided to do Science because I was anxious to sort of get on and get out in the world and I thought, 'Oh, I don't know whether I want to spent six years studying' – that's what I thought then. And, after all, in those days you could change from Science to Medicine, so I postponed the decision until the end of my first year.

Was the uncle a Kidman or a Conway?

He was neither; he was married to a Kidman.

And he felt this was the important way to go, obviously.

Obviously he did, yes.

So, buoyed up by your natural instincts and talents, Barbara, you begin at Adelaide University in 1945. What was it like, as a place?

It was great fun. It was a wonderful experience, I thought, going to university. I liked it much better than school. I was enthusiastic about work and, of course, having done Leaving Honours first year was very easy. It was possible to get exemptions from some first-year subjects on the basis of Leaving Honours results, and I could have had an exemption from Physics I; but I chose not to. So I went ahead and did the course and really there was a certain amount of overlap. So I found first-year university extremely easy academically and so that gave me time to do other things, and I really started to participate fairly fully in extracurricular activities at the University.

Can you tell me about some of those, please?

Well, I joined the Student Christian Movement, and that was really a great organisation. It was the basis of most of my social life at the University, I would say, because we had lots of activities – went away on camps, went on bush walks – and we met people from other disciplines, students from other disciplines, and from different first-year, second-year, third-year, everyone, postgraduate students, so you met a wide range of students through the SCM. It was a great place, it was very liberal then in its approach to Christianity, too; it was a very broad-based organisation, so it was good.

And I also joined the, I was very active in the Science Association and later on I got into student politics – not so much in first year, but after that, in second year.

And you actually eventually were on the SRC.

Yes, I was.

Barbara, can you tell me a little about the lectures in the first year: where were they held and who were the lecturers, perhaps, if you can recall?

Well, yes. The Maths lectures I think were held in the Prince of Wales Lecture Theatre, a building that doesn't exist now – it was behind the Mitchell Building – and the lecturers were very, very good. There were two lecturers who were former school teachers – in fact, I think all the staff of the Maths Department were former school teachers when I was there – and a Mr Gray and Mr Statton, Joe Statton, and they were very good teachers. I don't think they did any research but they were very, very good teachers, and Gray was an amazing man, he was quite an inspirational teacher, I would say.

Is he G-R-E, or A-Y?

A-Y.

And he was inspirational?

Yes. He was a very good teacher. I suppose he was a school teacher. But I think he was inspirational.

And the Physics lectures were shocking. We had Kerr Grant, Professor Kerr Grant – and these lectures were held in what is now called the 'Kerr Grant Lecture Theatre', a great big lecture theatre in the Physics Building – and they were really a bit of a riot. The girls all sat at the front, and they knitted; and the attendance at lectures was compulsory and the roll was passed around the class for you to sign, and of course all sorts of forgeries were done on the roll; and he was a bit of a showman, he did lots of practical demonstrations that were meant to demonstrate points in physics but often went wrong; and the whole things was a riot. In fact, I don't know how anyone could pass Physics I from attending those lectures.

A lot of students went also to the evening – including myself – went to evening classes as well. So we had to attend the morning lectures because attendance was compulsory, and so I used to go to the – I suppose they were, I don't know whether they were four o'clock or five o'clock, I think they might have been four – but that was a bit of a nuisance, having to go to two sets of lectures. The lectures given in the evening were by a man called Fuller, George Fuller, and he just gave solid physics lectures, they were perfectly clear and reasonably well presented.

Kerr Grant, physically, was quite an unusual-looking character.

He was, he was a character. He really was a character, and I had very unfortunate experiences later. When I did second-year Physics, I remember he gave this course on electromagnetism. I just couldn't make head nor tail of it, it was just – he was always making mistakes. He wrote all over the blackboard. He [had] a very, very poor blackboard technique and he'd often make mistakes. He'd work out some, I suppose you'd call it a 'theorem', some mathematics, and then he wouldn't get the right answer so he'd try to correct it and he wouldn't be able to. And it was not systematically given in any way whatsoever, and I really thought I'd have to give up because I couldn't make sense; and then I discovered a textbook so I just taught myself from a textbook. So he was a very, very poor lecturer.

And when I was doing honours Physics he wasn't there when I started. Honours students had to start early, at the beginning of February I think, and when I turned up the Reader in Physics, who was Dr Roy Burdon, gave me a perfectly good project to work on which I worked on for a month, practical project; and then, when Kerr Grant came back he reallocated all the projects. It was very much the days of the god professor, and Roy Burdon was a man who hadn't fared well under that system; and anyway, so I had to start again and, although the project he gave me was an interesting one, I didn't get any supervision from him, it was just left to me, really. No-one supervised me for my honours project.

So you were very much thrown on your own devices?

Well, I suppose we were.

One of the other funny things about doing honours Physics was that you had to have a reading knowledge of German, because German was supposedly the scientific language of the time. So every morning, I think at nine o'clock – or three mornings a week at nine o'clock – the honours class went into Kerr Grant's office and were given lessons in German by Kerr Grant. Well, they were hardly lessons; he'd read a bit of German to us – I think he spoke and

could read German – and they were an absolute riot. What we had to do then was to translate a paper. We were given a fairly long scientific paper in German which we had to translate into English. I had a pretty long one and I did it but I didn't have a very, I wasn't fluent in German. Because I'd learnt some German at school, I did Intermediate German at school. So he wasn't an academic leader, I don't think. He was a hopeless lecturer and he didn't do any research, as far as I know; I mean, virtually no research was done in the Physics Department then. And the other Physics lecturers were not very good either, so it's amazing really that we all got through. (telephone rings, break in recording)

Barbara, what about the other subjects that you were doing in the Science degree?

Yes, I did Chemistry of course. And it never appealed to me, Chemistry. I think it's probably because I had such poor teaching in Leaving Honours. But it was so-so, I would say, the teaching in first-year Chemistry. We had good practical classes, so I would say it was sort of an average teaching.

I also did a subject that was really biology. It consisted of one term of Botany and two terms of Zoology. And the Botany lecturing was good, but it duplicated what I'd done in Leaving Honours. The Zoology I think is worth commenting on, (laughs) because the lecturer for most of the time was Professor Harvey Johnson, who's quite a significant historical figure in the University because he went on Mawson's last shipboard expedition to Antarctica, he went on board the ship as a zoologist, and so he's quite well-known in that regard. But the lectures were extraordinary because he read the lectures. They were all read from written transcript. And one of the undergraduates had them duplicated – was quite enterprising, really, because we didn't have photocopiers then – and he sold, so you could buy, a copy of the lectures. And when the course was being given, if he departed at all from the lecture notes you could hear the reaction in the class, because they were all following these lecture notes. I guess it was solid enough material, but very uninteresting because it was being read.

And the practical classes were good, in Zoology. And I did come in – I think she may have given us some lectures, too – one of Sir Douglas Mawson's daughters, Pat Thomas, was a lecturer in Zoology and she was a very good teacher, I'd say, both as a lecturer and supervisor of the practical, demonstrator. So it was interesting, that was when I first came across her.

Well, Pat would have been an enthusiast, I suppose.

She was, she was. She was guite a fiery personality, but I think a very interesting person.

Any other lecturers that stand out to you in your courses?

In second year I did Statistics and I had Alan James, who was a young statistician, and he later became Professor Alan James, and he was all right as a lecturer. He obviously had a very solid background and knew what he was talking about, and it was an innovation, it was the first time any undergraduate lectures had been given in that subject, Statistics. It was statistical method, so it was given to help scientists who had to use statistics. It was very, very easy for someone like me who had some mathematical ability.

It was a combination; I actually had five subjects in second year. It was a funny arrangement. I did Physics II and then this combination subject, they were like half-subjects: Statistical Methods and Physical Chemistry, which was the part of chemistry that I was most interested in. And then, to do Maths, you had to do Applied Maths and Pure Maths, so sort of had two separate subjects, so probably two lectures a week – I've forgotten; but it was quite a lot of work, having all these five different things for which you had weekly exercises and lectures to attend and so on.

The Maths lecturers were Gray and Sanders, I think. He was a solid lecturer. By then he was Professor of Maths. He was a man who'd been educated at Cambridge. I don't think he did any research, but he was a very proper person.

All the lecturers knew the students, and particularly if you were a girl because after first year I was the only girl in Physics II and I think one of about three in the maths subjects. So everyone knew us and all the lecturers knew us. And a funny thing used to happen: after exams, when they were marking exams, the lecturers would often tell you that you were doing well or something in the ---. (laughter) It was very strange. They gave you a sort of running commentary on what was happening in the marking. So that was something that, when I became a lecturer, would never have happened.

Was that an indicator of the size of the institution at the time, do you think, Barbara?

I suppose; and the informality of it, everything was very informal. Although students behaved well in classes and always called lecturers 'Mr' or 'Dr' or 'Professor' and were very respectful of the academic staff. Also the undergraduates often got to know some of the demonstrators in Chemistry and Physics quite well, and they were often terribly helpful because they were very approachable, and I found the demonstrators in Physics a huge help.

Were they younger people?

Yes, young people. Only been graduated a few years. But they were always very enthusiastic and of course pretty bright people, and if you had problems you could ask them. So they were very helpful.

Barbara, you paint a picture of a place where there's a large accent on teaching but not a lot on research in the sciences: was that pretty much the way?

I think so. (telephone rings, break in recording)

Barbara, we were talking about the mix between research and teaching at the University at the time you were there, and it does appear that teaching had it.

Yes. Well, of course, when you're an undergraduate you don't really have insight into what's happening within departments; but I think the University was pretty dead. I'm sure there were exceptions to that, I'm sure there was some research being done behind the scenes. As far as I know there wasn't any in Physics, which was the department that I knew well, and I'm certain there wasn't any in Maths, so those two were the departments that I had most contact with and there was no research being done in either of them.

Barbara, I know that you did well academically. But, on another level, being a long way from home, how did you cope boarding out or whatever you did at the time?

It was difficult, it was very difficult. St Ann's College wasn't available then and I spent most of my undergraduate years living with family friends, very close family friends, where I shared a bedroom and where I would say the family didn't understand just how much work you had to do when you were at university. So I found the studying conditions very difficult. I was happy enough living with them, they were very kind to me and I felt part of the family; but I did quite a lot of studying at the University or in the public library.

What was the Barr Smith Library like at that time?

Oh, it was great. (laughs) A lot of people studied there, and there was that big reading room, so I spent many, many hours in the reading room. And during swat-vac² there weren't so many students there then in swat-vac because they were all at home. But there was a sort of convention that you broke off for morning coffee and went over and bought a coffee at the

² Colloquial for 'study vacation', the period between conclusion of classes and commencement of the examination period.

refectory. So it was quite a camaraderie about the students who were studying at the University.

I think when you got to honours you could get a carrel. There were these sort of study areas downstairs and you could get one of your own if you were an honours student. I didn't have one; I think you had to be an Arts student or a Maths, but I don't think it was available to me. Of course, no-one uses them now.

These are the enclosed rooms.

Yes. They're sort of semi-enclosed, little places, they were called 'carrels', and I knew several people who had them.

Barbara, you mentioned going to the refectory. What were the Union and the Cloisters area like?

It was, I suppose, essentially as it is now. The centre part of the Cloisters was lawn, it wasn't paved like it is now, and it was pretty busy at lunchtime. I think most people took their own lunch, but everyone gathered there. Maybe it was because of my contact with SCM and Science Association and so on, but everyone went there and had their lunch so we all had lunch together, it was a very friendly sort of atmosphere and a great opportunity to talk to people from other disciplines. And you could buy lunch, buy a roll, in the refectory. Of course, there weren't all the other eating houses then, it was just the ground-floor refectory. So in some ways it's like it is now, but I would say much friendlier and probably much more used than it is now. If I go down to the University now around lunchtime there seem to be more people out on the Barr Smith Lawns – although they were used too; but the area in the Cloisters was a hive of activity.

You mentioned the clubs and societies you were involved with. Was there a sporting side to that as well in the Union?

Oh, yes. It was much the same as it is now, I'd say, and they ran all the sports. I wasn't a great sports person but I did play netball – it was called 'basketball' then – I did play netball in University women's teams. I was down near the bottom somewhere. And I also played, there was a social tennis club out using the tennis courts by the oval, and they played on Saturdays and I used to play social tennis.

So those Uni Oval courts, there were three or four of them together by the grandstand, are they the ones you mean?

Well, they were on the south side of the oval.

Yes, they're the ones, yes.

Yes, yes. Yes.

Best courts in Adelaide.

Yes. Well, I suppose they had teams as well, but I think it was Saturday afternoons we used to play. Because there are other tennis courts in the parklands off MacKinnon Parade that the University has, too. But they weren't there then. When I was an undergraduate it was just these courts on the oval.

Barbara, you obviously delighted in university life. Can you tell me a bit about third year, because you did say to me that third year, academically, there were just a few blips?

There were, because I think I was doing Physics III, Applied Maths III and Pure Maths III. So the two pure maths counted as one subject, so that was a fairly heavy load, I think. And I was on lots of committees and in particular on this SRC³ – I'm not sure that it was called SRC then, I forget what it was called, but I was on this committee – and, in a typical undergraduate procedure we decided to rewrite the constitution. There was a sub-committee of three people that rewrote the constitution and I was one of those three, and we met almost every lunch hour and spent *hours* doing this and probably it lasted about ten years and then they rewrote it again, I'd say. But it was a very, very time-consuming thing and it did have an effect on my work. It was a distraction.

Why did the constitution need rewriting?

I can't remember why. The University was slowly becoming more democratic, of course. And the three people who were on the committee were Ralph Parsons, who was an Engineering student, and he later became Professor of Physics at University of Queensland; and the other one was a chemist, trying to think of his name, and he went to work in England at Harwell and then he worked I think for the Atomic Energy Commission in Sydney, I've just forgotten his name. They were both older than I was, but of course we had to have the token female on the sub-committee, which was me.

Were women beginning to have more of a life at university?

Oh, I think undergraduate women have always had a life at university, they've always been fairly active. One of the interesting things in the Union was that the Lady Symon Building, of

course, was for women and the George Murray Building for men. There were halls on the ground floor where meetings were held, but the basements were wash rooms and the upstairs rooms were either for women or men. But I remember when I got on this SRC committee, all the meetings were held in the George Murray, (laughs) so I got to go to see the George Murray Building, which I hadn't seen, hadn't ever been up the stairs, until my third year.

Women undergraduates were quite prominent in the University. But of course in the science subjects there were always a majority of men and Maths and Physics very few women, very few.

Barbara, were you the first woman to do honours Physics?

Yes, I was the first woman to do honours Physics.

Do you recall how you came to be invited to do it?

Well, I think it was sort of automatic. I was invited to do it because I did very well in third year. So I did do well in third-year Physics, but not in the Maths. There was never any suggestion that you *couldn't* do it, it was always permitted and I was always given equal opportunity over everything as an undergraduate; I was certainly allowed to do it. The only thing I would say is that everyone thought it was a great thing for a girl to do honours Physics in the Physics Department, but the suggestion was that they needed women schoolteachers, and so the idea was that I would then become a teacher.

So a woman academic was a very unusual thing, I suppose, in the sciences.

I think it was pretty unusual in anything. I mean, there were women academics but they always held junior positions. I don't think there were – as an undergraduate, I didn't have – – –. I may have had, I think – I mentioned Pat Mawson may have given a few lectures in Zoology I; I don't remember having a woman in Botany, I can't be sure of that; but for the rest of my four years of university I didn't have a single woman lecturing. I don't think there were any women demonstrators in Physics or Chemistry. There were in the biological sciences. So they were pretty scarce.

Barbara, can I ask you to reflect on this immediate post-War time, because the Commonwealth Retraining Scheme comes into it too, doesn't it?

It very much did.

 3 SRC – Student Representative Council.

So there must have been a very large influx of particularly young men who'd been in the armed forces in some way. Would you like to talk about that at all?

Yes. It had a very significant effect on the University. In fact, someone was telling me recently that in fact it doubled the population of the University. Now, by and large I would say they had a very good effect on the University because they were very mature and, certainly in my area, in Physics and Maths, they worked very hard and they were very good, the students that came. I think they worked much harder than the other undergraduates did. And in Physics they were a huge competition to me personally because there were a group of about four of them who worked a lot together and it was pretty tough to be competing with them. They were very nice people. I think there were some of them, perhaps, who weren't as mature. But university was a serious place for them, so not many of these CRTS trainees took an active part in extracurricular activities, I would say.

Were they – I guess today we'd use the term 'driven' – by their experiences, they wanted to get on and get moving?

Oh, I think they were older and a lot of them were married and so they were under sort of financial pressure, I would say, although they were well-paid, well-supported at the University, they were all anxious to get on with life, I think. That would be my impression of them. A couple of these men I know very well, they're family friends, and that's how I would interpret it.

Some of them, of course, had a unique opportunity. There were people who wouldn't have ever come to university if they hadn't had this opportunity, and it's really amazing what it opened up for them because two of them, two of the Adelaide CRTS trainees, became professors of mathematics. So that's pretty remarkable, really; and they were both people who wouldn't have gone on to university if it hadn't been for the [Second World] War.

Barbara, I can think of at least one, if not three, lawyers who would never have gone to university who became senior partners and very senior legal figures, too.

Yes.

It just seemed to be, if you like, the thanks that the nation gave to those people also gave an impetus to those who would never have got a look-in.

I agree with that. I think perhaps times have changed and now educational opportunities are there that didn't exist before the War. See, I think I was fortunate, really, that I was given the opportunity.

Did you have a scholarship? I meant to ask you that.

Yes, I did. I had a scholarship. I got, it was called a 'Leaving Bursary'. The Leaving Bursary was means tested and I've forgotten how many were given state-wide; I think it was either twenty-four or forty-eight, may have been forty-eight. And I've forgotten, did I get four credits in the Leaving, did seven subjects and got four credits and I won a bursary? And my parents' income allowed me to get that bursary, which exempted me from university fees and also had a living allowance if you lived away from home, so it was very useful to me and to my family. It would have been much harder, it was much harder to get a Leaving Honours Bursary because there were only twelve in the State; I don't think I would have got one.

Would it have been difficult for your parents to send you to university on any other basis?

I think it would have.

So in effect you had that unique opportunity.

Yes.

Well, not quite unique, but had an opportunity.

It's more difficult when you live in the country because just the fees at university aren't the only cost, you know. There are travel costs and the cost of living away from home. So that makes it more difficult.

Barbara, did you really enjoy the honours Physics year? So we're getting towards your final year at university: was that an enjoyable time, or did the things we talked about earlier make it less enjoyable?

I think it was enjoyable. I separated myself from the extracurricular activities, I didn't do much around the Union in my honours year; but I had lots of friends by then at the University, even though they weren't doing Physics that didn't seem to matter, and I found it was a very – my fellow students were always very supportive and I must say I take my hat off to them. I was the only girl and there were nine young men, and they treated me very equally, I thought, they treated me well. So I think I enjoyed it. It was pretty hard, I had to work very hard. But I enjoyed it, I found it very interesting.

Again, it was Kerr Grant, he was still the Professor of Physics, and we were given a very impossible curriculum, really, for honours. We had this very thick textbook by a German called Jose that used an unusual kind of mathematics that was pretty hard to follow, and that was the basis of most of our exam. There were some things that weren't in the textbook. But

I think everyone who did that honours year has kept their copy of Jose (laughs) because it was a terrible book and very difficult. But anyway, we all got through and some of us got firsts.

Was there a thesis component ---?

Well, I mentioned this practical, yes. Yes, there was. And I've no idea of the proportion, we weren't told. We weren't given any details of our results, only the overall result. But I can't remember. I don't remember writing a thesis but I must have. I haven't got it. In the end, although I was critical of Kerr Grant, it proved to be quite an interesting thing because it was in modern physics, it was on cosmic rays, and although it was not very successful as a research topic, because he really didn't understand it, nevertheless it introduced me to modern physics, so that was very good. And I actually went to Melbourne to get some assistance from someone – the Physics Department sent me to Melbourne to get some assistance from someone in the Physics Department in Melbourne. So certainly that was, I don't know, would have been only about twenty per cent of the course, I would have said.

Now, the trip to Melbourne, that would have been *via* the express, I suppose? By train? Yes. Yes.

Was that a useful time?

Well, it was very useful, the business of going to the University was extremely useful. I don't think I could have done it without that trip because there was no-one in Adelaide who could help.

Was the University of Melbourne in those times a similar feel to Adelaide?

I think so, yes. But I had the feeling that in Physics it was a bit ahead of Adelaide, you know. It was more research-oriented, I think. That was the feeling I had, but not really based on anything very solid except my own experiences with this – there was this cosmic ray group there, and so they certainly helped me.

END OF DISK 1

This is a second session of an interview with Barbara Kidman for the University of Adelaide Oral History Project on 14th November 2005, interviewer Rob Linn.

Barbara, in the meantime – we've been talking about you doing honours; in the meantime you've met Ren Potts. How did that come about?

Well, I think I met him through the SCM. In fact, I'm sure I met him through the SCM. I don't remember, actually, how I met him or the first time I met him or anything like that. He was doing Maths at the University and later did honours Maths.

So you become quite friendly - what, by third year, was it?

By third year we'd become quite friendly, I'd say, yes.

And what was Ren's position at the time?

Well, let's see. I did honours Physics in '48, I did honours Physics, and he did – by 1947 he was doing honours Maths, in 1947. So he got a Rhodes Scholarship in 1948.

So when did he head off to the UK?

He headed off in '48.

And you had to finish your honours.

I was doing my honours.

Were you engaged by that time?

Yes, we were. We became engaged, I think it was probably in April that year we became engaged. Because he wasn't allowed to get married under the Rhodes Scholarship. And scholarships were very scarce then, there were almost none, so an opportunity to go overseas was very, very valuable.

So he headed to Queen's College to further his research.

Yes.

And I suppose at that time it would have been very difficult to have done it anywhere else, the research side.

Well, possibly Cambridge would have been a better place. But the only way to go to Cambridge, really, was to finance yourself, so it was out of the question for him, he didn't have any money. So this was a great opportunity.

What was Ren's background, Barbara?

Well, he went to Prince Alfred College, his father was a master there.

Very famous master there, as it turns out.

Yes. (laughter) Yes, yes. And he actually got – he had to do Engineering at the University. Because of the War, he was drafted into Engineering at the University. He had a health problem, he had had a problem with an infection in his arm, and I'm not sure whether he would have been fit to go straight – he tried to go into the services and instead was drafted into doing an engineering course at the University, which he started doing, and it wasn't really for him, he was not good at practical things and sort of discovered that he loved maths, so decided to do honours Maths, or decided to study Maths. Of course, he did Physics as well, but he got hooked on maths, and so he changed over to Science. I'd have to look up, I can't remember or I don't know when it was that he actually left Engineering and went into Science; but he certainly was a Science student when I knew him well.

Well, Barbara, how did it come about that you got to go to England in Ren's footsteps, if you like?

Well, he went over there for the start of the academic year in about September 1948, and he wasn't really settled in what he was doing there and he went to quite a few lectures because, although you have a tutor in your college in Oxford you also go to university lectures. And he met a woman lecturer who I think was in Mathematical Physics, really, and she was at Somerville College and he talked to her quite a lot. He told her that I would like to go to England, and she said that the principal of Somerville College, who was a medical person, had a research group in Oxford who needed a physicist and she couldn't find one. So that began it, the negotiations were done mainly by post because telephoning was very difficult then, and she got references from the Physics Department about me and the outcome of it was that I was offered a position as a research assistant on a three-month trial. And so I left actually in December 1948, I left by ship to go to England.

And your father paid the fare?

My father paid the fare.

That would have been very helpful.

Yes. I was very lucky. My parents were always supportive like that. I mean, I didn't have the money to pay the fare.

Was it expensive in those days?

Well, comparatively it was expensive. But of course I travelled as cheaply as possible on a passenger ship, as Ren had done. And it took, I think it was four and a half weeks or something it took to go there. I arrived at the end of January. So I'm sure it was a big expense for him to pay for me to go, but he willingly did.

Were they still living at Port Lincoln, Barbara?

Yes.

So how did you find England?

It was a wonderful experience, going there. It was after the War and so there was still food rationing and everything was very poor. The standard of food and the standard of clothes, I think – no, I think clothes had come off the ration; but people didn't have any money and so the standard of living was not as high as I was used to in Australia. But it was terribly interesting – I mean, who wouldn't be interested in going to Oxford? Everyone had bicycles in Oxford and we cycled for miles around Oxford on weekends and holidays and we hitch-hiked to places further afield, caught buses, and saw a tremendous lot.

How long were you there for?

I was there for two and a half years. And the research team that I was with was working on the biological effects of radiation, because the atomic bomb had, of course, happened, been used towards the end of the War and not very much was known about the effects of radiation. And so in this group that I worked in there were biologists and a chemist and a physicist and Janet Vaughan had some space in the basement of the Pharmacology Building at the University and so the group worked there. That was a wonderful department; I mean, I wasn't a biologist, but they were very, very active in research, the whole department was very research-oriented, and so that was something, a new experience to me to be in a department where people were doing research. Of course, ours had nothing to do with pharmacology, it was just that they'd provided the space for Janet Vaughan's group; but we were given all the facilities of the department and it was a great place to be.

Barbara, you marry Ren on the 1st July 1950, and then Ren has to finish his DPhil, I think, doesn't he?

Yes, that's right.

Now, what brings you back to the University of Adelaide, to rekindle that link?

Well, what happened was - it was not good for me, for my career, because I had enrolled, had been able to enrol for a DPhil myself in Oxford, but I hadn't finished. But Ren had to get a job and it was very, very hard to get a lectureship. He didn't want to go into school teaching, he wanted to get a lectureship, and his research had been in mathematical physics. And he noticed that Professor Bert Green had been appointed as the Inaugural Professor of Mathematical Physics at the University of Adelaide and they were advertising a lectureship. He thought – well, we both thought – that if he'd had the opportunity to work with a person with his reputation in England he would have jumped at it, so why not do it in Adelaide? So, because he couldn't get a job in England and because this opportunity seemed to be there, he applied for the position but didn't get it because it was sewn up. One of Green's students had got the job; that had been prearranged. But when the people around the University heard about it they desperately needed staff in the Maths Department so they invited him to take a lectureship in Applied Maths. That seemed fine: the fields are related and he imagined, correctly, that he'd be able to continue working with the mathematical physics group in Adelaide. So that's why he took the position and we came back. It didn't enter either of our heads that it would have been better for me to have stayed on in Oxford and finished my DPhil.

How much more would you have had to go?

Probably a year. Someone had already got, or was in the process of getting, a DPhil from the research that we were doing, it was sort of collaborative research, and really you had to wait your turn to get it. So it would have been at least a year.

What I should have done was, there is a degree at Oxford called a BSc, which is like an MSc, a research MSc in other universities, and I should have submitted a thesis for a BSc. But at the time I thought, 'I don't want that.' It seemed to be a second-rate degree and I don't want it. But it was very silly. I should have done it, because a BSc from Oxford would have been good.

Now, when you come back to Adelaide you begin a PhD here in Adelaide.

I did, yes.

In '52?

Yes, beginning of '52.

And what was that based in?

That was on what we called biophysics, which was the application of physics to biology – again, which is really what I'd been doing in Oxford; but this was an entirely different field because naturally I had to do what there was expertise at in Adelaide and there was a fairly new lecturer in the Physics Department called Stan Tomlin, an Englishman, who had just got an electron microscope and he was very anxious to have students working with the electron microscope. So I switched entirely and started again in an entirely different field and worked under him, really on the uses of the electron microscope in biology, but we had to use physical techniques so it was really physical techniques being applied to biological topics.

Now, Barbara, you told me that when you returned with Ren you really had no intention of staying for a long period, is that right?

That's correct, because we thought of it as just being a stepping stone. And of course we didn't stay for long because – well, in 1955 Ren had a year's study leave in America and I wasn't able to work in that year, I went with him and didn't do any work. Then we came back for, I guess, two years, when I did take up a position as I now had my PhD and I took up a position still with Stan Tomlin's group as a – I got a research grant and I was a research assistant. So I started doing that and then I stopped because I was pregnant and my husband wasn't very keen on me working, continuing to work, so I stopped. And then he got a job in Canada, which was a tenured position, as an associate professor at Toronto, so we moved to Canada.

Now, just coming back to going to the US, did Ren get a Fulbright, was that ---?

Yes, he did get a Fulbright.

So that enabled you to at least – – –.

Well, that paid the fares, I think. I think he had a postdoctoral fellowship from the University of Maryland and he had the Fulbright, which paid his fares and I think a few travelling expenses in the US.

So those wonderful endowed funds in America came to help.

They did, they did. It would have been ---. Because he was on study leave, he must have got his salary. I can't remember. It was very tight. We were very, very short of money in America. We had to be very careful to manage on the money that we had.

So additional travel was probably very difficult.

It was difficult, because we went to a meeting of the American Physical Society – he was still doing mathematical physics, Ren was still doing mathematical physics, and we went to a meeting of I think it was the American Physical Society – which was in Mexico City, and we travelled there and back by bus. It was four days of bus travel, four days and nights of bus travel, actually. But still, it was a very interesting experience.

A bit stretching?

(laughs) Yes, even then, when we were very young. No, it was very difficult. We didn't have any spare money but we tried to make the most of what we did have.

Could we just talk for a moment about the University of Adelaide in that interregnum between coming back from the US and going to Canada? Was there a social life also around the University in those years?

Yes. I think over the years the social life increased. As academics had very active social interactions, there were lots of dinner parties. I think later more so, because we had lots of visitors. At that time the University didn't have so many visitors; but still, there was a lot of social interaction between academics. It was good, because this was a chance to meet people from other countries and I think that was the influx of overseas people that spurred this on, because everyone felt they had to be welcoming to overseas visitors and so this set off — — —. And of course they were utterly dependent on their social life at the University, whereas people who'd grown up in Adelaide had all their school friends and university friends. And so we moved out of that sort of local social set, I would say, into the University-based social life, on the whole.

You said that progressive dinners were a great favourite.

(laughter) Yes, yes. I remember those progressive dinner parties, which were not good, I suspect, because there was a lot of alcohol was consumed. But there'd be a pre-dinner drinks at one house and soup at another house and main course at another house and pudding at another house, and so people had to drive between the houses. They weren't a success, later, when we were more conscious of how much alcohol we'd had.

And, Barbara, you still didn't own a house at that time?

No, we didn't own a house because we didn't want to settle in Adelaide. Ren really wanted to go to the US to work, and we'd been there in 1955 on sabbatical and it opened up all sorts of

opportunities to him. The person he worked with then became a close collaborator with Ren for many years and we wanted to get back there, and that's why we went to Canada because it seemed to be a foothold into getting into America.

Barbara, were there characters at Adelaide University in the mid-'50s period?

Characters?

You mentioned one, Harry Messel.

Oh, yes. Well, Harry Messel – that's right, Harry Messel. He came out with Bert Green and he was a real character. Everyone always said that he bossed Bert Green around. I mean, Green was the Professor and he was a lecturer, but he bossed him around. When I was working in the Physics Department he happened to have a university house that was near where we lived in Walkerville, and he didn't have a car, he cadged lifts from people. He used to come home with us, and he was very – I mean, Ren came home when I wanted to because I was working in the laboratory, and I used to have Harry pestering me from about four-thirty onwards, trying to get me to go home. (laughs) And he got very friendly with – this actually can't have been, because Rowe was here. When did Rowe come? Rowe was the Vice-Chancellor. And he was trying to persuade the University, Harry Messel was trying to persuade the University to set up a research institute in Adelaide. There was a scene with him outside with Rowe, trying to persuade him to finance it, I remember seeing them talking outside the Physics Building. But then Harry – he worked very, very hard on it. I think Bert was just in the background, Bert Green.

And then Harry went to Sydney and met a physics professor from Sydney, and it ended up in a very short time he was offered a job in Sydney and so he left Adelaide, and of course he did start up this research institute in Sydney, which could have been done in Adelaide if the University had had the initiative to finance it. They got private money for the Harry Messel's fund thing in Sydney. So he was one.

I suppose Rowe himself was a character, the Vice-Chancellor. I think it was not that period, I think it was probably – oh, it must have been that period. During that period was the incident of the footprints, this was a student prank, and one morning – it was late in the year, either November or December – when everyone arrived at the University there were yellow painted footprints running from the Vice-Chancellor's residence. He had a flat or I think it was quite a large apartment in what had been the old Anatomy Building – it's now in the area where the Barr Smith Library is, on the upper level – and there were footprints running from

his front door to Elder Hall and then up the wall of Elder Hall, where a tailor's dummy was suspended from the turret of the little tower on top of Elder Hall. And the footprints, on their way there, diverted into the Prince of Wales Building to go to the men's toilet and then they went up there. And then, I'm not sure, I think the footprints went to Bonython Hall. But anyway, the police, everyone in the University gathered around, I would say half-past nine in the morning, everyone was looking at all of this very amused about it, and while we were all looking at this the caretaker was in a great flap and the Fire Brigade was coming and all this sort of thing. And in the middle of all of this the skull-and-crossbones flag burst out from the top of one of the Bonython Hall towers. (laughter) And *immediately* the police and the security people surrounded Bonython Hall and got very excited about it and they thought they'd caught them. Well, when they went up the towers they discovered, of course, that this flag had been launched by a mechanistic device and there was no-one there at all. So it was a huge joke. I don't think Mr Rowe was amused about it; it amused everyone in the University. It was called the 'Abominable Rowe-man', and it must be the greatest student prank that ever happened at the University.

And who did it has never been announced. I do know one of the people. I would never divulge it. I didn't know at the time, but I learnt later who it was. And they were very, very clever people, I think, and it was an amazing ---. I mean, no-one knows how they did it, really, because ---.

They're probably doyens of the community.

Yes, exactly. (laughter) So Mr Rowe didn't get on with – I never had anything to do with him personally. I met his wife as a University academic. But he didn't get on with undergraduates. I always feel he's been misjudged by the University because, as a University guide, I had to explain to people why Mr Rowe's portrait was put in the out-of-the-way place when other Vice-Chancellors had their portrait in a prominent position. I felt it was very wrong because he actually transformed the University from that lazy, old teaching institution into a modern university, I think. He introduced study leave, he thought that the academics were far too slow in their demands for support from government, and he transformed the University. So I think he deserves credit for that, really. (laughs)

I've never heard the other story before, Barbara. That's fantastic.

Which story was that?

The Abominable Rowe-man.

Oh, really?

I knew about the footprints but I'd never heard it in its entirety.

(laughter) And I know it's pretty accurate, because I've confirmed it. I haven't set the date, I'm going to try and determine the date. I think I can. (laughs)

So, Barbara, some time after this event with one child you and Ren head off to the University of Toronto for a time that you personally don't enjoy all that much.

I didn't enjoy it, I think because I'd been working most of my life and I wasn't working, and I felt very tied and there weren't opportunities for me in Toronto to do anything, really. So I wasn't sorry when it proved to be rather short-lived.

In the meantime, in the US, Ren had become involved in Detroit with operations research?

Yes. It actually transformed his life. I think he was technically head of Applied Maths in Toronto. And, incidentally, after he left a stream of Australians went to Toronto, so it sort of started something. But anyway, while he was there, he acted as a consultant for General Motors through a man whom he'd met while he was working in Maryland and they were doing operations research at the General Motors Research Centre, and so that sort of launched him into that field, which is where he continued doing research for the rest of his life, really. Mostly in that area.

So, Barbara, he had an associate professorship in Toronto.

Yes.

And then the job in Adelaide, the Professorship of Mathematics is advertised?

The Professorship of *Applied* Mathematics. There was one professor and I think under Rowe more funding came and so they advertised – it was, I guess, when Professor Sanders died – they advertised for two professors, Pure and Applied. So Ren applied for the position and was appointed.

So after two years in Canada you returned.

Yes.

Were you anxious to come back to Adelaide itself, or would it have been any opportunity that had come up, do you think?

I think we'd like to have come back to Australia. I think we'd got a bit disillusioned with the United States as a place to live, by then.

Why was that?

Well, it just all seemed busy. We hadn't been to California; we felt differently about the United States after we'd been there; but our experiences there had been in Detroit and in Washington and they were very busy places and not sort of academically-inclined, really. So we were a bit disillusioned about the way of life, I think, and the universities that we'd had contact with hadn't been particularly attractive.

So when did Ren take up the appointment of his professorship? Was that '58?

I think it was '59, the end of '59 I think.

Were you still doing any work at university at that time?

When I came back here I did some part-time teaching.

Was that in physics?

Yes. I don't think I did tutoring, I may have. Earlier I'd done tutoring in maths, part-time, just casual. And I didn't immediately start doing that because we had some family problems, my mother was very ill, and a year or so later I did some demonstrating in physics. I used to just go in for I think six hours a week or something like that, taking Physics I classes of practical.

But you decided to let that go by?

I did, because I realised that – I was very disillusioned with it because when I'd been at Oxford I'd been doing research and when I came back doing a PhD in Adelaide I'd been doing research; and then I went back into Physics I demonstrating, and I did literally demonstrate the same experiments that I myself had done as an undergraduate. I thought, 'Well, surely the world's changed since then.' And I realised that experimental physics, if you're going to be successful at it, you have to spend long hours in the laboratory, you can't do it at home. So I thought I'd better do something I can do at home, do partly at home. So that's why I decided to take up something else.

So what did you take up?

Well, I had thought of doing statistics, because I'm not a brilliant mathematician but I have mathematical ability, and I thought, well, statistics – there was a postgraduate diploma in statistics and I thought, 'If I did that, then I can probably do consulting in statistics.' But Ren, he was the one that suggested that I do computing instead, there was also a postgraduate diploma in computing, so I went to see Professor Ovenstone, who'd just been appointed. This was I would say the end of 1965. And he said, 'Oh, no! You won't do that; I'll give you a job.' Straight away. So I just had to do a little bit of training and I got a job as a programmer.

So you'd had your PhD by then.

Oh, yes.

Now, were you and Barbara Possingham the first two women?

Yes. We both were awarded our PhDs in 1956, and I think we were the first two women to get PhDs at Adelaide, University of Adelaide.

So, Barbara, with no previous background almost, you begin computing - - -.

That's right, yes. Well, no-one had any previous background in computing because there weren't any courses, and so everyone had learnt on the job. And someone who'd done Physics and Maths found learning to program fairly straightforward, so Ovenstone knew that very well and so that's what happened to me.

Now, in the meantime, in '62, you and Ren had been back to America, to New York, for sabbatical.

In '62, yes.

Then you returned again, and could you just describe how the Computing course and what was going on there evolved –

Yes.

- over the '60s?

It's a pity I didn't have the book. Ren and I wrote a history of computing at the University, and he was actually one of the prime movers in getting the University into computing. The administration at the University was thinking that they would have to use some sort of equipment to process enrolments at the University and they were talking about getting some sort of punch card system, and Ren heard about this and thought it was very important that

they use IBM equipment because of its compatibility around the world, and also he knew about the computing. So he persuaded the University to move in that direction. The Vice-Chancellor was then Henry Baston, he was extremely supportive when he knew what the situation was.

When the first South Australian computer arrived it was out at WRE, Weapons Research Establishment –

Oh, that's right, so it was.

– and Ren had spent a summer there. I think it was before we went to Canada, he'd spent a summer working out there. He got a security clearance and went out there and learnt to program on the WRE computer and did a bit of work for them while he was out there. And then of course, in the '60s, after we were settled here, there was a computer being built in the Engineering Department, a computer called Cirrus – building a computer was then a research project – and also there was a computer, a bigger, better computer had arrived out at WRE, and so the University had to do something. There was a lot of pressure on it to buy a computer, and the Engineering Department wanted the University to fund this research project they had, there was a lot of controversy about it. But in the end they bought a small IBM computer and set up a service out at the Weapons Research Establishment so they could use the two computers in conjunction. So he'd been very involved with that.

I arrived just at the end of the little computer that the University had. Ovenstone was appointed and bought a very large, modern computer, the largest and the most modern computer in Australia, the most powerful computer in Australia. The University had to borrow money to finance this and he had to earn money by selling the services of the computing centre, and that's why he needed a lot of programmers to program for all the people that wanted applications. So I was one of those application programmers.

But in the meantime, he'd started courses. He started an honours course and he started this postgraduate diploma. The idea for the postgraduate diploma came from Cambridge. He'd been at Cambridge himself – I think he did a doctorate at Cambridge, Ovenstone – and they started their computing courses with a postgraduate diploma. The idea was that it was a good way to get physicists and mathematicians and so on into computing. They were quite practical courses but also had theory in them. So it was a very good idea, really, and it's persisted, strangely enough, the postgraduate diplomas in computing.

The way it started in Adelaide was they had a stream that was meant to be for commercial purposes and a stream that was more academic. When I arrived the courses had just started, I think they'd been going for about a year when I came to the Department.

So if one wanted to use the computer, would one make a booking or something for a time slot?

Well, the small computer was run very informally. People operated it themselves, there was no operator, so I think you probably made a booking. When the big one came it was a service, and you didn't operate the computer yourself, there were operators, so it was a standard computer service. For people who were in the Department we used to, I think, originally put our own card decks into the computer; but that soon came to an end.

With the curriculum side of Computing Science, Barbara, how would people work it out with no textbooks and everything just beginning and no settled curriculum? How did you do that?

Well, it was difficult. I was actually appointed, when I finally became a lecturer, which was 1970, towards the end of '70 I was appointed a lecturer, I was specifically appointed to launch a first-year course, first-year half-subject. Really it was very difficult to know what to put in the curriculum, because it wasn't standard practice to have undergraduate, first-year courses. There were a few textbooks about, but none seemed suitable, and we had only a half-subject so we couldn't do what you might like to put into a whole first-year course. But it wasn't meant to be just a programming course, you could do programming separately; it was meant to be an academic course. And it was difficult.

The procedure that was used was that I had to make a draft curriculum for the course and it was submitted to the departmental committee, and so we had their input into it, too. So that's what was followed. It was far too ambitious, I think, the first course we had.

Now, did some of the ideas for that course come from your time in California in 1967?

Not really. When I was in Berkeley in 1967 – again Ren was on study leave and I wasn't allowed to get a job – I worked in the computing centre, really, and I just worked, I wasn't paid, I was just sort of an assistant and I used their computer and did projects for them. I wasn't involved with teaching, but it was good because it made me see how another university ran its computing centre and I also mixed with people who were active in the field. So that was a very good experience for me.

Could you talk about how Computing Science evolves? I think you pick up, was it a readership in '78?

No.

Senior lecturer.

Well, the University was very reluctant to accept Computing Science as a discipline. I think that, by and large, in the Faculty of Science, physicists and chemists and biologists thought that Computing Science was programming. And it began in the Maths Department in Adelaide, the computing at Adelaide, because people were teaching numerical analysis and using the computer at Salisbury. But it was very, very difficult for Ovenstone to get his courses into the curriculum. Now, the postgraduate diploma didn't present a problem to anyone, they were very happy with that course, and the third-year course he got in because by then third year had been unitised, and so introducing third-year units didn't interfere with students doing Physics and Chemistry and Maths. But when it came to the lower undergraduate courses, the people were worried about losing students. They thought, 'Now, there aren't going to be so many Chemistry students because they're going to be doing Computer Science.' So there was bitter opposition. He tried to get a first-year subject and it wasn't, he couldn't get it through the Faculty.

And then Statistics and Computing came up with the idea of having two half-subjects, and they were accepted. The half-subjects were finally accepted, after a long battle. And people, I think they still were of the opinion that it wasn't an academic discipline because it was just programming and that was easy. So it was a continual battle to introduce computing components into the curriculum. It was repeated when it came to second-year.

I was very involved in the planning and introduction of a second-year course, which was essential if we were going to have students doing modern honours Physics, they had to have a proper undergraduate background in Computer Science. And it was very, very hard to get it introduced into the Faculty of Mathematical Sciences because, I think essentially, everyone was afraid they'd lose undergraduates to it, you see, because there wasn't space in the ---. There wasn't a second-year Mathematical Physics, so there was Applied Maths, Pure Maths and Statistics; and everyone was afraid that students would go to Computer Science.

Did Ren have a continuing interest in it, too?

He was always interested and the Applied Maths Department was always supportive because they were realistic and they weren't afraid of losing students. (laughs)

So when we introduced the second-year course it had to be unitised. There was a ridiculous system of mixed subjects was introduced. This was a compromise that we reluctantly agreed to because it was the only way we could get second year into the curriculum, and that was that you could do two-thirds Computing and one-third Statistics, twothirds Computing and one-third Pure Maths, that sort of arrangement. They had almost negligible enrolments in these mixed subjects. We had very large second-year classes in the Faculty, and they were just a waste of time, they were a nightmare to fit into the curriculum, the timetable, all the bureaucracy associated with it was very difficult; and after a few years they were removed because they weren't a success. I think they just had to learn to live with the fact that people do what they want.

What happened, of course, later, was that second-year subjects were unitised and the problem disappears then, with unitisation of subjects, which probably should have been done earlier.

Did you find that time of your lectureship reasonably difficult at Adelaide, on a personal level?

Yes. Even later it was more difficult. I'd say in the middle years it was very hard work because we were introducing new courses, we had very large classes of students from all the way through – I mean, in third year at that time you'd have seen about a dozen people doing third-year Physics and we'd have well over a hundred. And we were always short-staffed because we weren't given enough staff, and even if you had a position it was hard to find people to fill them. And the curriculum was changing all the time, the subject was advancing so rapidly; and I think that the unique situation of Computer Science is that you have to do practical programming and it wasn't something that you did in a laboratory between two and five. In those days we had to use the big computer and punched cards, and students had to spend a lot of time on their practical programming. It was very difficult for the students to get their cards punched, they used to mostly punch them themselves, and there were never enough, there was never enough equipment, and we weren't given enough tutors, that sort of staff, because I think the students needed a lot of help and the University didn't recognise that. Not being a laboratory subject, it was sort of caught between the two: it was a unique subject. So it was very difficult and I worked very, very long hours.

But as a woman also, was there a difficulty there?

Well, there was later. I think the difficulties increased all the time I was in Computing because there were very few women lecturers. I think the only other lecturer in the faculty – certainly in the Faculty of Mathematical Sciences, there was one Pure Maths lecturer who was a woman; there were none in Physics and Chemistry; there may have been one or two in the Biological Sciences and Geology; but there was no network of women.

I was just thinking Maud McBriar would have been in Botany.

Yes, but she wasn't a lecturer.

No, she wasn't, was she?

No. You see, no-one -

That's right!

they were all demonstrators.

I'd forgotten that.

They'd got junior positions, yes, yes. There were very, very few lecturers, *very* few women lecturers.

Just thinking how capable she was, too.

Well, she was. And they were – throughout the Biological Sciences and Geology, there were very, very capable women, but always in untenured positions. And then they introduced a tenured position of senior tutor, but again women tended to get delegated to that, that was the position that women got. Very, very few women became lecturers and there was no network of women. But some of the academic staff were very difficult and I think went out of their way to be difficult to me because I was a woman. I always call it 'the battle of the sexes'. I mean, now there is an active feminist movement and they were very anti that movement, and I was never an active feminist; a feminist at heart, but I was never politically active in the movement. I also found that undergraduates had problems in Computing. Over the years I had numbers of undergraduates who had difficulties with staff in the Computing Department in one way or another.

So this is young women?

Yes. Not so much – it's just they were offended by things that were done, particularly Asian students.

Was that a feature across the University in the era, or particularly in your department?

Well, I think the atmosphere about women was a feature across the University, but I'm not aware of course of what happened in other departments. I mean, I would have thought it was peculiar to Computing, would be my instinct, but I may be wrong.

So, Barbara, you end up taking early retirement in 1987. Were there reasons behind that?

Yes. In the year or so before, things had changed in the Department. We had a new professor, head of department, who was quite autocratic and he wasn't a person that I got on well with, and I had really thought I was unfairly treated. And Ren was going to retire in 1990. And I'd also had some health problems because I developed diabetes, insulin-dependent diabetes, and I had been working two-thirds time as a result of that and then I thought I did a normal week's work as working two-thirds time. And anyway, I decided that I'd get out of it. There was no need for me to work and so – it was after twenty years – I retired.

You retired in one sense, Barbara, but not in another.

No. Well, I did still have a research student and I was an active member of the Department while he was still working on his thesis, in the sense – well, I didn't go in there much; but I had a desk and a filing cabinet and I used to go to seminars. So I did in that sense stay active in the Department. I was officially a visiting research fellow. And at that time, as a matter of fact, the library was very important to me because I was using the Barr Smith a lot, and they didn't have the provision that came later that retired academics got lifetime use of the Barr Smith Library, and so one reason why I liked being a visiting research fellow was that I could use the library.

And then the other project that I was given, which I undertook to do and was very slow in finishing it, was to write this history of Computing in the University. So I was sort of delegated to do that, unofficially, and didn't really do much about it for a number of years.

And then Ren came to help with that.

Yes. Well, I was being very slow about it. The faculty started to get interested in it and at first I was going to do it with Nick Capon, who was the former Director of the Computing Centre, someone I knew very well. But he was like me, I think, he was a bit slow too in doing it, and in

the end he really wasn't interested. So finally Ren came into it and together we did it, and it was very good us both doing it because he knew a lot, and he worked at home and I did the outside work. And I should say that people like Nick Capon, Nick helped a lot with it; lots of people helped us a lot.

And this came out as one of the 125th Anniversary publications.

Yes. It was just privately published but the University printed it, and we hadn't expected it to be a best-seller. In fact, we didn't sell it; we gave it away. But we've always been very glad we did it because I think it's important to record things. Like this. Things get forgotten. And we interviewed a lot of people, everyone we could think of who'd had any connection with the early days of computing in the University we interviewed.

And Barbara, from that time you've developed, I suppose you'd call it a passionate interest in the history of the University?

I have. I have, because – I think it was because I became a volunteer guide at the University, taking heritage tours, so I had to learn a bit about the history of the University. Ren had been very interested in the history of Mathematics in the University at a time when no-one else was, and he had himself written the history of the Maths Department and he'd done private research on the first Professor of Mathematics, Horace Lamb, both here and in England and had written that up, and so he was interested. So that sort of spurred me on, too, and I became very interested in it and did a terrific lot of reading and – I mean, it's 'research' in quotes – looking things up. And then, of course, I later became, when the Archives volunteer group started, I joined that, and that has been a great experience, I've become very interested. And I have also come to realise that I do have an exceptional knowledge of lots of things about the University, which had just happened because I've been interested.

Barbara, one other facet of University life with which you were involved were the equal opportunity at the University.

Yes. Well, it became trendy, I suppose, to have equal opportunity officers in various institutions and the University appointed an Equal Opportunity Officer, who I thought was very good and very nice. I've forgotten her name. And a committee was formed in this regard and we, I think, had to deal with any complaints and also to look at things that the University should be doing. But in the same area there was a lot of concern at the University because of the inequality of the numbers of tenured staff *vis-à-vis* the genders. There were very few women who had tenured positions, and there were very few women in Science and Maths,

period, and I think the same in the Arts, considering the number of students. And the women who were on the staff tended to be tutors or demonstrators, and so there was concern that this was because the selection committees weren't being fair. Well, of course, that really wasn't the case; I mean the reason was that women weren't applying for the positions, and that was probably because there weren't many suitably-qualified women, I imagine. In my case, I just out of the blue applied for a lectureship and I was appointed. I have no doubt that I was the best applicant because I wouldn't have been appointed otherwise. I think women all had that experience, that you have to be the best to be appointed – well, certainly early on. So there was a lot of concern about this. So they brought in all sorts of rules like you had to ask women to apply when a position was advertised, women had to be invited to apply. So all the selection committees had a difficult job; the departments had to try to find and suggest names of women who had to apply for positions. So that was a lot of work. I don't know whether that was successful or not, whether that led to people being appointed who wouldn't have been otherwise, I can't answer that; all I know is that I got on committees because of it, and that was a bit of a nuisance, really, (laughter) because it was time-consuming. So I think all women academics got onto committees because of that.

I always feel these things are overdone. I thought that the equal opportunity requirements were greatly overdone. I mean, you must give people equal opportunity but I'm not sure that there needs to be so much fuss about it. I suppose if you work with people of good will it wouldn't be necessary. I know that my husband wouldn't have been, he would have given everyone equal opportunity all of his life, even though he grew up in a different time. He acknowledged that I gave up my career for him. Neither of us thought anything of it at the time, it was just what we did; but in retrospect we realised that that had happened. But he was always very fair and he would have been very fair in dealing with any staff that he had, and I just sort of assumed that most academics were like that. I may be wrong – till I went into Computing, and then I discovered they weren't. So I suppose it's necessary to have these sort of bureaucratic approaches to things, but it did take up a lot of time.

Well, Barbara, we have an overview today and you've talked about your whole life, really, as part or parcel off and on of the University of Adelaide. Thank you very, very much for being willing to provide all that thoughtfulness and experience that you have yourself.

Well, I hope it's helpful to someone.

Thank you.

END OF INTERVIEW.