PhD Pioneers:
The Living Experiences of The Open University's First PhD Graduates

Oral History interview transcript

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My name's Liz Currie. I'm a researcher for The Open University recording an interview for the Looking Back, the first Open University PhDs project on the 27th April 2021. Would you like to introduce yourself?

I'm Michael Baker. My PhD was on the volcanic rocks of the Northern and Central Andes, mainly in Chile and Bolivia. Currently a semi-retired geological consultant, which really follows on from my PhD.

That's fab, thank you very much. So we're going to start the interview. So Michael, can you tell me, cast your mind back and talk about where you were born and if your family were familiar with higher education?

Well my father was in the army, so we moved about quite a lot. I was born at Woolwich, where there's an army garrison there and I was a toddler in Hong Kong, then moved back to Woolwich, then Colchester, then West Lothian in Scotland. And then when my father retired ended up near Heathrow Airport at Heston, where I went to grammar school. No one in the family previously had had any experience of higher education, but while I was at grammar school, I should say I have two older sisters. The elder of them, Pauline, had developed an interest in geology, so as things were at the time and when we moved to Scotland it was not really an option for her to go into higher education, so she gave me her geological hammer, which developed my interest in geology. My main interest at school was actually chemistry, but when I came to decide what I'd like to do for an undergraduate degree, I thought well chemistry, there's hundreds and hundreds of chemists, there are not very many geologists.

So along with another person at the school that I was at, we decided we'd both like to do geology. The school couldn't provide any tuition, we both applied to Oxford and we both got in. So I studied geology at St Edmund Hall in Oxford starting in 1970 and graduating with a second class degree in 1973. And once I graduated I

was looking round thinking what I could do and while I was an undergraduate I did have once a job with Rio Tinto Zinc in Australia, and the normal procedure was if they liked you and you liked them, they'd just employ you straight off. But I didn't really like them and they didn't really like me because I didn't write long enough reports. I'm more of an A4 person, one sheet. So I was looking around and this advert appeared from The Open University saying they had a PhD studentship available looking at volcanoes in the Andes.

And I thought oh I'd quite like to look at volcanoes in the Andes, so I applied. And the background to that project was that Peter Francis, who became my supervisor had previously, before he joined The Open University had taken part in an expedition to that area from Imperial College and he was very keen on scientific expeditions. So I applied for the studentship and was awarded it.

And what did you like about it, why did you decide to take it?

Well just for the sheer joy of travelling to the Andes and not having a job really.

So what was your first day like when you first got there?

Well at the time the studentship was awarded, Chile was run by the left wing President Salvador Allende, but the week I started there was a military coup, which was a bit of a, put things back a bit. Military took over and they killed a lot of the left wing people and exiled some others to the, I might mention it later, but there was some uncertainty for several months as to whether the project could go ahead. By the middle of 19-, so I started the PhD in September '73, so by middle of '74 it was decided it could go ahead, so we bought a Land Rover in the UK painted Open University Andean Volcanoes Project on the side of it and went on an expedition basis where you asked various companies if they'd like to donate any goods and we ended up with quite a lot of detergent and tinned food. And you might think why would we want detergent?

But it proved when we got Chile a very useful bartering tool, because at the time the Chilean economy was flat broke and the area we were looking at was very distant from the capital, so they were very short of things like detergent. So detergent paid for keeping all our stuff safe while we were there. As I say the PhD project was run as a scientific expedition and there were two main field trips; one in the second half of 1974, which lasted three and a half months. So the Land Rover, everything had to be self-sufficient, so the Land Rover was full of spare parts, food, anything we couldn't get locally, because the area we were looking at was very remote and it was a day's drive to anywhere, so we had to service equipment ourselves.

For the first trip there were three of us; myself, my supervisor, Peter Francis, and another lecturer, Richard Thorpe. Because the terrain was very unsuitable for pitching a tent, we all had to sleep in the Land Rover. Someone in the front seat, someone in the back seat, someone in the back, because the area was quite high, most of the terrain was between 3,500m and 5,500m and it was pretty cold at night, -10, -20, and quite cold during the day. The procedure was really to, because of the lack of oxygen we had to, all cooking had to be done in a pressure cooker, which we had in the back of the Land Rover. There was a rather more cavalier attitude to risk assessment then. The first trip was quite eventful, getting used to, partly because the military were paranoid about left wing guerrillas infiltrating Northern Chile from Bolivia, so it was shades of Che Guevara, but he wasn't around at the time fortunately.

So they marked out a lot of areas as minefields. Because of the climate, because it's very arid and strong ultraviolet undisturbed ground develops a very thin skin. You can tell if anyone's dug anything, so you could tell where they'd just marked out the minefields and hadn't planted any mines in them. And a couple of times we were told off by the Chilean army patrols for driving over their minefields. In fact on one occasion they drove over their minefield to tell us off for driving over their

minefield. It was a bit surreal, but several years later we discovered they had actually planted mines, but not in the minefields.

Wow.

After a few weeks there was this big conference, international conference down in Santiago on volcanoes of the Andes. So the two people with me, Peter Francis and Richard Thorpe went down to join the conference and Professor Gass from The Open University went down to join them, so they left me up there in the mountains on my own. And fortunately risk assessment forms hadn't been invented then, otherwise it would have not been possible to do that. The arrangement was that they would fly back to the main city on the coast and if there was a change of plan for some reason, they would send me a telegram to the nearest Post Office. Well when they did change their plans, they decided they could fly to a more regional airport, which was a bit closer. So turned up at this airport and there was no sign of me. To add to the indignity there was no public transport and they had to go into town on the back of a dirty pickup truck, which when the lecturers had tried to impress the professor, it's not very good.

And they went to the Post Office and found the telegram, which I hadn't received and so they were quite worried something nasty must have happened to me up in the mountains. So eventually they phone the British Consul in the city on the coast and they said no he's not missing, he's here at our cocktail party. So they must have been relieved, but I don't think they ever did see the funny side.

So just stepping back a little bit, when you first started, or before you first started, what appealed to you about The Open University to go there, apart from the fact it was a job?

Well I didn't know what it would be like to be a research student at Open University, but I did have some knowledge of what went on. Because my older sister was one

of the first science students, so she started in the first year, which I'm not sure if it was 1970 or 1971, but she was, so I knew what they did. So I was interested in The Open University, but not from the point of view of a PhD study.

What interested you about the OU from what you did know?

Well they'd just extended its reach into the wider community. Because my sister couldn't attend a conventional university, apart from the issues of money because she had two toddlers at the time to look after.

Is that you or your sister?

My sister. So the first trip lasted three and a half months and after we'd shuffled around Northern Chile quite a lot, we went into Bolivia and on the way the Land Rover turned over, but that was [unclear 0:13:10] no one was seriously injured. We ended up in Bolivia, I went down to a high part of Bolivia called Potosí, where the old Spanish colonial sewer mines were and when we got there I promptly collapsed with suspected appendicitis. But fortunately it was possible to get me to the nearest suitable hospital just in La Paz in time for an emergency operation, so I survived much to the relief I suspect of Professor Gass, who apparently had been dreading the paperwork which would have been involved if I hadn't survived. So I came back to the OU and did another trip the following year, which would be 1975.

That only lasted two months, it was much less eventful and managed to ship all the rocks back. So most of 1975 I spent crushing up the rocks and measuring their ages. Most of that work was done at Royal Holloway College when they were in North London and at the British Geological Survey laboratories in Graves Inn Road in London. So I didn't spend a great deal of time at The Open University during that time. Most of the time I was there after I did that and I spent about a year writing up and eventually I wrote up about three months after the three year deadline. But at the time the science department was quite small. It was housed in

a series of wooden huts, so everyone was more or less on top of each other, but everything was very friendly. So there was a great deal of mixing between lecturers, secretaries, the course managers and research students.

I don't think The Open University knew quite what to do with research students, because there were so few of them they were just treated like everyone else. So it was much more, what struck me was it was very much more egalitarian than Oxford was.

And what makes you say that, just the way everybody mixed?

Everyone mixed socially, having a drink at night. Lunchtime at the University, well you possibly still can, everyone sat out on the lawns to have lunch and it was just. There were obviously a few people who didn't like to mix socially, but mostly people did.

And the topic that you were studying, was that quite a new field to be working in?

In one respect that we'll come to later, it was standard techniques but applied to an area which had not previously been studied. Very few people had been into that area before to look at the rocks.

You mean a geographical area that hadn't been studied.

Yes and also at the time I started doing the PhD, satellite imagery became available. Whereas the military going round had very old maps, which were almost completely worthless, surveying had been done, we had the advantage of satellite images to we could see exactly what was what and where we could go. And satellite images showed a lot of rock which had not previously been known by volcanoes. I don't just mean the conical pointy things, but other, lots of other

different styles of volcanoes that we could find. So that became a major part of the work eventually, because when I achieved the doctorate at The Open University, probably jumping a bit here. Did I attend the graduation? No, graduations are not for me. I didn't attend the bachelor's degree graduation ceremony either.

How did you feel when –

You're just one of a very large number, so it didn't appeal to me and I had all these other things to do at the time.

How did you feel when you passed your PhD and you knew that you had graduated?

Well at the time I felt it was the end of an era, sorry to leave The Open University. But as it happened after graduating I got this crazy job in Iran doing surveys, standard geological mapping along the Palestine border, which was too dangerous for the Iranians to do. The locals didn't like the Iranians and would kill them if they found one out on their own, because it was an area where there was a great deal of undercover transport between Iran and Afghanistan. Drugs and illegal immigrants came west and guns and money went east and this area was straddling that traffic. But strangely enough we occasionally came across bearded gentlemen with Kalashnikovs that when they realised you were British were very friendly, it was the Iranians they didn't like. But that job generally involved getting into a helicopter of a morning, being dropped off at the top off a mountain and then walking down the mountain collecting rocks and being picked up again hopefully later in the day somewhere else.

Ended in confusion as the Iranian revolution gathered pace. So once I'd managed to get back to the UK, Peter Francis, my supervisor, offered me this postdoctoral fellowship back at The Open University. That developed a theme of using satellite imagery to investigate the geology of the earth. So I helped set up The Open

University expertise in that field for a couple of years. And using satellite imagery to map the geology and mineral deposits and oil deposits has been the theme of my life ever since. After the two year study I went to Australia for four years, working for a company doing the same sort of thing, using photographs, satellite images to sell our studies to mining companies or oil companies. And after four years in 1986 I decided I'd be better off doing it for myself back in the UK as an independent consultant.

So when I got back to the UK, because of the relationships I'd developed while I was a PhD student and a postdoctoral fellow, I moved back to the facility of The Open University with a view to represent a number of people I knew socially when I was at The Open University in those, both as a student and a postdoc fellow and I still see four or five of them regularly now.

Would any of them be doing PhDs at the same time that you did, or were they staff?

No, one did a PhD, one started a PhD but didn't write up. The others were staff. So when I was a postdoc, am I getting the chronology right? I think no, it was when I was a PhD student, there was always the opportunity to be an assistant lecturer at summer schools, which was a truly amazing experience. So I did summer schools, which involves partly laboratory work, partly field work. In a normal undergraduate field course everyone's young and fit, so everyone keeps up with the leader. But in The Open University you've got much wider, The Open University summer schools students are a much wider range of abilities. So the job of the assistant tutor at summer school was to act as a sheep dog and make sure that no one was left behind and anyone who was not fast enough to keep up with the leader could be told all about the geology.

I was just so impressed about how keen these students were, because as soon as you appeared at breakfast you were asked questions, questions and questions,

until you disappeared from the bar in the evening. Something as a conventional undergraduate you just don't appreciate the contact you get. So if you're an Open University student and you only get intermittent contact in odd tutorials, the chance to actually get hold of an actual geologist in the field and ask questions is very strong. So I actually think in retrospect it was one of the highlights on my time actually at The Open University, other than being in the field. [Unclear 0:24:41] actually the studentship was funded by the Natural Environment Research Council who decided through my studentship that everyone doing a PhD on volcanoes should go on a trip to Italy to see the Italian volcanoes, which was quite exciting.

I had been to Vesuvius, Stromboli, I'd been to Stromboli before, but to see Stromboli erupt at night, which it does every five minutes, 10 minutes, but also Etna. Etna was in one of its phases or interrupting lava, so we were able to go and actually stand beside lava flows. The lava flows were only about a metre deep, quite friendly things trundling down the side of the volcano, so that was also quite an experience. I mean it was nothing to do with The Open University, only the fact that I was a student at the time.

So when you look back over your time doing the PhD at the OU and indeed the research fellowship, what do you think about the OU as an organisation?

I think it's wonderful actually. One other, well six or seven years ago I actually enrolled as a student myself and did a diploma in Spanish, I did two courses. I didn't do the summer school in Spain, but I did do the summer school in Manchester, which was almost as good.

And why do you think it's wonderful, what is it about it?

Well just that it reaches out to people, it's the reaction of the students, people see what it means to them. Being an undergraduate at Oxford didn't mean that much to me, other than just study and learning how to punt up and down rivers. But it's

obviously a different reaction when people want to study and they couldn't study for some reason and now they can study.

Thank you. So post doctorate we've talked, you've talked quite a bit about already. So I think you've covered a lot of this, but looking back over your doctorate, how if at all do you think it changed your life from where you were when you first starting telling me about what your life was pre-university?

Well it was really the postdoctoral fellowship, which obviously built on the, it was through Peter Frances, my supervisor. I must say the actual PhD subject didn't affect my life at all. It was following on from that and the interest transferred from just measuring the ages of the volcanic rocks and working out how the volcanic, the sequence had evolved, to using satellite imagery was the key thing, because that's controlled my life ever since.

So is there anything else about your time at the OU, or any time really that we haven't, I haven't given you the chance to talk about yet that you want to? I think there was a couple of things you said you'd come back to, but you might have already done that.

Yes, it did strike me when I was looking at what I'd, for the purpose of this interview what I actually did was how impossible it would be to do that nowadays. You just couldn't mount an expedition like that nowadays without two vehicles, five people and you'd never leave anyone alone. Even when I was doing the postdoc fellowship I just went out to Chile and took the Land Rover and drove about anywhere I wanted on my own. There was never any question about safety.

And do you think that's a good thing?

No I don't. I think sometimes the safety aspects stultifies the activities.

Do you feel that the timing of when you studied your PhD and your fellowship and also where you were studying it, somewhere non-traditional like the OU, was that something really, was that a moment in time that was inspirational but perhaps wouldn't happen again for others?

Well I don't think the experience of doing the same thing at the science department now would be the same, because it's a lot bigger department, and it's housed in proper buildings and it would be much more like a conventional university. I think it's been fun to be a PhD student at that time in the university.

In the '70s.

Yes, well probably in the '80s as well, but I think since the department moved out of wooden huts I think it would be much more like a conventional university.

END OF INTERVIEW