This is transcript of an interview of Olav Slaymaker [O], Professor Emeritus at the University of British Columbia, conducted on the 7th of February, 2020. The interview was conducted by Leonora King [L].

Olav would welcome discussion and elaboration on matters of mutual interest at olav.slaymaker@ubc.ca.

Leonora can be reached at leonora.king@kpu.ca.

Square brackets [] are editorial insertions.

L - This is an interview with Olav Slaymaker, on the 7th of February 2020. You were thinking of starting with those three narrative threads or themes that we've talked about before with respect to your career: faith and science, intellectual community or academia, and family.

O - Right, so these three themes kind of come in and out of my career at various stages, but they have a distinct chronology. The first theme is the importance of family, and secondly the interest in the development of physical geography and geography in general, and thirdly, questions about the relationship between science and faith, being two distinct ways of seeking truth.

Starting with my family background. I was born in Wales in 1939, and that was a poor year to go to Norway for a holiday, which we did because my mother was Norwegian. So my sister and I and my mum and dad went off to Norway in 1939. My dad had to come back to the UK, and he said to my mother "why don't you stay for an extra month?", which happened to be September the second 1939, when the war was declared, and the boat on which we were traveling back to Wales was ordered to return to Norwegian ports. And this had enormous implications for me because I was with my mother and sister and lived in Norway, whilst my dad lived in Wales. And we were under considerable surveillance because of the Norwegian resistance movement. And my mother had taken British nationality when she married my dad, and she was a prime suspect. So she got extensively interviewed and tortured during that time. But the point of this issue is that the family gave a sense of security in a hostile environment, that the family was the actual defence mechanism against the Gestapo and the torture. And as a child I can remember feeling that the family unit was everything that would defend us against forces of evil. And my memories of family during that stressful time was one of tranquillity and calm confidence in God's care, in spite of the fact that I never met my dad until the end of the war when I was 7 years old. And that in itself set up a series of kind of traumatic events, but nevertheless the importance of family continued when I started to develop my own family with my wife Margaret, and it's also been a theme with our children and grandchildren's families. We'll come back to that in the detailed discussion.

Secondly, my interest in, well, geography, geomorphology, physical geography, whichever you like, was I think inspired by the fact that we used to travel between Wales and Norway every third year after the end of the world war. Each visit, in 1948, 1951, 1954, and 1957, reinforced a sense of the differences between landscapes, both physical and cultural. I was prompted to ask questions about the reasons for these differences. In 1952 when I was 13, I was introduced to a professor of Geography and Anthropology, the first academic I had ever

either heard of or encountered. He was the author of a famous book called "The Natural History of Man in Britain".

L - How did you meet him, Olav?

O - He was introduced to me by my sister's geography teacher. My sister's geography teacher had great hopes that my sister would become a geographer. My sister resolutely resisted. So when her supervisor, Professor **Fleure**, came to Swansea, she took the second best and introduced him to me. I was entranced by his ability to answer some of the questions that I had been asking about comparative landscapes, and decided at that point that my life's career would focus on geography if that were possible. I had never heard of academia at this stage and realistically had no idea what I was committing myself to. but this was a kind of eureka moment. So that's the second theme: interest in academia.

And thirdly questions about my Christian beliefs, and relationship between faith and scholarship. All my relatives both in Norway and the UK were seriously engaged Christians, but of two very different varieties. The Norwegians were Lutherans, and the Brits were Plymouth Brethren. So the former were life-affirming and socially engaged, and the latter life denying and socially isolated. How can I make sense of the distinction between beliefs and practices? Someone, my Sunday school teacher, in fact, dug out a book by a doctor, a GP called Rendle Short, a book called "Modern Discovery and the Bible" published in 1947, that actually addressed many of the questions that I was asking. So that was my first conscious addressing of questions of how do we reconcile things associated with religious faith and science. A lot of it was archaeological discoveries and the consistency of the digs with the chronology of the Old Testament and this kind of thing. But if I hadn't had that, I think things would have gone astray.

L - So you're saying that you had these two perspectives on faith and living within that faith and you were trying to reconcile them. Seeing the scientific contextualization of faith gave you a way towards reconciling these differences?

O - That's right, because one of the approaches - the life denying one - is in a sense the easy one because it avoids the questions that science poses. And the other one was a joyful solution, but didn't involve serious investigation of science. So of the two it was easy to choose the life affirming one, but it still left those questions about how you resolve all the tricky thoughtful things unanswered.

So those are the three themes, and that's I think enough about that. It seems as if I'm pressing it too much but actually the more I think about it the more I think these are absolutely crucial, because they never left and they are still very much part of my thinking and living right now.

L - Great, so that actually goes quite a ways towards answering some of the questions in the first part of the interview which are about your early life and the personal, disciplinary, institution forces that guided you towards geomorphology, all the way through to the end of your PhD. So obviously you decided on physical geography at quite a young age because of the conflicts and contrasts that you experienced as a young person, and then eventually after deciding you wanted to pursue geography you ended up at King's College at Cambridge.

O - So the British system is crazy because it encourages you to make decisions at an early age, but it sort of suited my impetuous style of making decisions - like the thought of becoming a professor at the age of 13. The system encouraged you to think very specifically and narrow your choices as early as possible. So I had, for my what's called my A-level - the last two years in high school, or grammar school - I read mathematics, geography, and history. Just those three subjects for two years, plus what was called scholarship-level geography. So the whole of my high school program in the last two years was weighted towards those three subjects. And that meant that you are able to compete in the national competitions for scholarships in a way that would be impossible for kids here, simply because of the focus that you had. So I was fortunate enough to win a place at King's College, Cambridge to read geography. My position was *in statu pupillari*, and you see the pretentiousness of the Cambridge system - have it in Latin. This was called *in stat pup*. It's the lowest form of animal life in the college, overshadowed by the exhibitioners and scholars. So starting at the bottom of the ladder.

L - So all students start there?

O - All students are either *in stat pup*, which is the majority, and the exhibitioners of whom there are several, and scholars of whom there may be only one or two. Normally in King's College, the scholars were Etonians, because in 1441 King Henry VI had established this college together with Eton, at the same time, and right up until about 1880, only students from Eton College were allowed to go to King's College. So it was the very home of privilege, and just a ... just a crazy system. But anyway, actually the process of interviewing was something of a pantomime. When I met the senior tutor, Dr John Raven, a classical scholar with substantive ecological research experience, I declared that I was coming to King's to study geography. "Well, Mr. Slaymaker, I have some bad news. We have no College fellows and no students who read geography at King's. We will consider you for admission only if you agree to sit either the history or the mathematics entrance examinations.". Well, I wasn't prepared to go all the way back to Swansea, a nine-hour couple of train rides and tell my parents that I had failed, so I chose history. And, in fact, this worked out as extremely advantageous. First of all, the fact was that I had an outstanding history teacher in school. He taught social history at a time when people only thought about kings and queens and wars. And it meant that I went into a college where I was tutored by the fellows of whom there were no geographers. But I was also in the Department of Geography, which is a university thing, where I could learn my geography. So, by way of explanation, Cambridge University operates a bicameral system, whereby the university as a whole consists of disciplinary departments, and the Geography Tripos, which equals the geography curriculum, is done in the departments and secondly independent colleges. Academic lectures are provided in the university departments, and tutorials are conducted within the colleges.

L - So you would have attended the lectures outside of the college, and then tutorials within the college. What does that mean?

O - Well, it's a one-to-one relationship with a Fellow, and you had to write a full-length paper each week and defend it in a one-to-one relationship with a Fellow. I was terrified to begin with.

L - And you had no geography Fellows in King's College.

O - No, nothing.

L - So who are you presenting these papers to?

O - At King's College, I was tutored by a social anthropologist and an English specialist. I could only rationalize this by thinking that Milton's 'Paradise Lost' was deemed to be the closest expertise to geography, and all my geography was learned in the university Geography Department. It transpired that I had arrived at Cambridge at a fortunate time. Two of the most transformative geographers of the 20th century had arrived one year before I was admitted to King's, but they were in different colleges. So Peter Haggett was in one college, Dick Chorley was in another college, but I met them in the lectures. The lecture theatres where these gentlemen lectured were packed with students from every part of the university, because lecturing standards across the university were sometimes abysmal. But this is a remarkable thing, that the Geography Department was attracting people from all over the university. Never happened before as far as I could understand.

L - Because of the quality of the lectures?

O - Because of those two people yeah, yeah. My experience of being tutored by Professor Meyer Fortes in social anthropology, who's an expert on the Ashanti of Ghana and by Dr. John Broadbent in English, combined together with geography lectures from Haggett and Chorley, made my first year *in stat pup* a uniquely pleasurable experience. So in a sense all this was reinforcing my interest in geography in general, but it rapidly narrowed down to physical geography because of the particular influence of Dick Chorley. So that's the context of King's. I could say a lot more strange things. But I suppose we should move on.

L - Well, I'd love to hear a little bit more about what Dick Chorley was talking about at the time. What ideas he had brought to Cambridge.

O - Yeah, so the common denominator between Haggett and Chorley was they came back to the UK having been to the States and they both brought back North American ideas, essentially derivative from the Quantitative Revolution that had been initiated in North America. And one of perhaps Dick Chorley's most outstanding publications was his open systems theory in geomorphology – US Geological Survey Professional Paper 500b, 1961, and he was kind of bubbling over with all this systems thinking and to me it was a total revelation. I'd never heard anything like it, and of course lots of students were impressed by it.

L - Did they talk about the Quantitative Revolution at the time or was that a term that has been ascribed looking back?

O - No, it came into currency in the UK - I'm not sure exactly when it came into currency in North America - but with the so-called Madingley lectures, which I think I mentioned before. The Madingley lectures were arranged as essentially summer schools for school teachers in the UK and they were run entirely by Haggett and Chorley, with a few visitors, and the theme of these lectures was 'it's time to change geography'. And every aspect of geography was involved, and that's why Peter Haggett was able to write such a spectacular synthesis of human geography. And Dick Chorley had his interests much more broadly than just geography. So it was an electric atmosphere and a lot of things that I reflect on are a function of the electricity in the atmosphere of the time when I was there. So, you know, you could have arrived at Cambridge maybe even two years before I did and fallen asleep in most of the

lectures. There would have been some substantive scholars, but they had no idea how to communicate. So this was very much a function of the dynamic people. And even the tutors - Meyer Fortes was an amazing guy.

L - These were your tutors in King's College?

O - The tutors in King's. John Broadbent was engaged in a stand-up fight with CS Lewis and this links up with my subsequent interest. Have you heard of CS Lewis? He moved from Oxford to Cambridge, and he moved into a very hostile atmosphere at Cambridge because the whole reductionist approach to English was the dominant mode, and CS Lewis came in as this antique gentleman with his expertise in Anglo-Saxon and ancient traditions. And of course [he was] a very profoundly religious person. And John Broadbent, my tutor, was a profoundly irreligious person and so we didn't get into a fight because he was a gentleman as well as a scholar and I didn't dare, frankly, to raise any objections. But I mean, he spent a lot of time on interpreting Milton's Paradise Lost. And that for me was a great experience because he put on Paradise Lost a secular interpretation, and I was only just arriving at understanding Paradise Lost from a sort of contextual point of view. So I had these conflicting ideas happening all around me. And that's one of the things about the value of the college life. I was having breakfast with the Fellows, the developments in protein engineering and enzyme production...

L - There were Fellows in the college working on that?

O - And they were living in the college.

L - So just for context, for people who might not know, so these Fellows live in the college. The tradition would be that they are celibate, that they would essentially retire in the college as well?

O - They would live there permanently. So all the senior Fellows were in this monastic tradition. I mean you're looking at a tradition that goes back to the 15th century. And very little actually changed in terms of that assumption that the Fellows were male, the Fellows were celibate. And they did whatever they had to do in their sexual needs freely and as comfortably as they could, but they had no "normal experience" of life.

L - Was that an assumption, that celibacy and intellectualism are connected? That to be intellectual to the extent that the college would hope they would be celibate?

O - They would not be distracted, was the idea. Which is a curious assumption, which has only really collapsed recently with the scandals in the Roman Catholic boarding school traditions. I mean that it was never exposed until the recent obvious failure of the whole idea.

L - Was it a pragmatic rather than a religious choice to have the Fellows be celibate, or is the difference between pragmatism and religiosity in that context not relevant?

O - I think that there was very limited religiosity. Even though the college had its own Chapel, which is one of the great cathedrals of the world, most of the Fellows did not enter the college chapel except on high days and holidays. So there was a complete breakdown. But that would have been the case up until again the 1880s, that there was a very close relationship between the idea of academics being religious as well as academically focused.

And the whole idea was that they should not be distracted by the other sex. So they just got attracted by the same sex instead.

But some of the people that I was eating with and living with were Morgan Forster the novelist, Pigou the economist, Edmund Leach another social anthropologist and Bernard Williams, a moral philosopher. But it was a communal experience and it was breaking down at the point when I was there, because people like John Broadbent, who was a young Fellow and was recently married, was causing a lot of trouble by saying, you know, "I'm just not coming in every day, I'm not going to live there, I've got a house out in the suburbs" and so I could see that whole system was falling apart. And in fact, you know, 10 years after I graduated, the college became co-ed and the whole system changed. But in the context that I experienced, the idea of it being co-ed was inconceivable. It wasn't that anybody was opposed to it, nobody could imagine it! So it was very fast transition. And King's was one of the three colleges that went first on this and more interestingly, perhaps, was that the first woman at King's became the senior tutor. She controlled the admissions policy. A woman called Tess Atkins, who worked as a historical geographer, and so students started coming when she took over as senior tutor. So there's an interesting way in which the mechanism of change was implemented simultaneously. There still isn't a large number of geographers a King's, but it's still very much a going concern. There are some colleges that have a huge geography reputation and always have had very large numbers of geographers, but King's has to be different.

So what else was there? Oh, there was a curious story about my arrival at King's where my first day I met my next-door neighbour who turned out to be an Etonian, and he greeted me in Latin. And I was so shocked, I didn't know what to do, so I replied in Norwegian, which shut him up completely. But it indicates the kind of elite type of education that the Etonians had, in which he was about to show this coal miner from South Wales educated in a state school how superior an Eton education was.

L - Last time we talked you also mentioned that one of the reasons the decision was made to admit you to King's despite the fact that there were no geography tutors was because Kings was trying to deal with their elite legacy.

O - And interestingly enough, that is still the case. They're still working on it because there's still a bunch of scholarships that are reserved for Etonians. So what Eton college does is they put their lesser scholars in for the closed scholarships and their bright students go for the open scholarships. And that's why they still end up occupying all the scholarships. And there's nothing they can do about it because that's part of the deed from 1441. But they are making notable efforts and, you know, it's now more like a 60/40, with the 40% being the private school group - mostly Etonians.

The final point there, which is really a tiny point, but it gives you another indication of the kind of odd traditions that existed, my first encounter with the lady who was in charge of looking after my room, called my 'bedder', spoke to me and said "Would you be wishing to have beer at six o'clock in the morning, sir?". I said that's the last thing I want to do six o'clock in the morning. But apparently this was a tradition that the more distinguished or more elite people from colleges, like Eton, would be revived in the morning by having a pint of beer. It was a different world. So I was wandering about in this extraordinary world and you know, just wondering what to do. The whole thing was unreal.

But this pantomime continued, because - well, not so much pantomime as good fortune - because you asked how did you end up in the US after your BA in geography? During my third year of the geography curriculum, I struck up a correspondence with Dr John Miller at Harvard University's Department of Geology, expressing my interest in his geomorphological research. John Miller is the third member of the team of authors, Leopold, Wolman and Miller, that produced the first substantive fluvial processes in geomorphology text [Leopold, Wolman and Miller, 1964]. So I had read John Miller's research on mountain geomorphology, and he encouraged me to apply for a Frank Knox Fellowship as a basis for admission to the Harvard graduate school. I was successful in landing the fellowship, but not John Miller's supervision, as he passed away from bubonic plague just one month before I turned up outside his office.

Fellow graduate students, Larry Lustig, Larry Dingman, and Harrison Jack Schmitt - of astronaut fame - graciously assisted me during my first weeks, and a replacement for John Miller was appointed**:** Dr Alan Jopling, who assumed supervisory responsibility for me thereafter. Alan Jopling, incidentally, did not get his tenure at Harvard but moved to the University of Toronto Department of Geography shortly afterwards, and had a strong contribution in flume work in sedimentation at the Toronto campus.

L - Before we get too far into the U.S., can I just pick up on a theme you mentioned last time. Dick Chorley and Peter Haggett's idea of the BTA - Been To America - and how that had been quite transformative to them. To what extent that, in addition to John Miller, did Richard and Peter's attachment to the transformative experience of America influence your desire or choice to go there?

O - Dick Chorley had promised me support for my research if I were to return to the UK with my BTA degree. I was able to pick up a two-year fellowship from the Department of Scientific and Industrial Research in the UK and I found myself back in Cambridge, UK, armed will all the remarkable experiences that I will tell you about in a moment. But it was then that I learned the details of Chorley's personal connections with the Columbia University school. Stan Schumm, Mark Melton, and he, all having been part of the Quantitative Revolution under Professor Arthur Strahler. And during ‘63-‘64, Dick was entertaining visits from all his Columbia friends, and I, as his doctoral student, had the privilege of meeting each one of them.

And this was the kind of connection. It's who you know, not what you know. So the direct legacy is from Strahler, who had all these graduate students, and then those graduate students formed a network. And this of course makes the link with UBC. So when I was punting Mark Melton on the cam, I'd never heard of UBC. But he introduced me to the pleasures of the West Coast and so that was influential in my eventual decision to come to UBC.

L - Did Chorley encourage you when you were at Cambridge to go and get a masters in the US?

O - Absolutely. He said I'm not going to support you for a direct PhD.

L - Okay, so you had approached him about doing a PhD.

O - Yeah. And he said "if you go get a masters in the states and get the experience you can there, then you'll be ready to do a PhD".

L - Okay. So then you reached out to Miller?

O - That's right. I'm quite impressed with myself for doing that, actually. It was a good move, even though he died. I mean, I didn't know if he was in the Geology Department. I didn't know what his home address was.

L - This probably seems like a dumb question, but how do you track someone down? Do you just send it to the department or to the university?

O - Well, two steps: there's this Frank Knox Fellowship, which is a university award. So you throw any of your credentials into that competition, but at the same time you have to have admission to a department. So it's the departmental context of John Miller that was the most tricky thing, because I assumed that Harvard, having produced many geomorphologists in the past would be very active in geomorphology, and it was but it was all in geology at that time. As you may know geography was cancelled at Harvard in 1954, which was only four years before I started university at Cambridge. So I was sufficiently ignorant of that fact as I was writing letters to the Geography Department at Harvard and all sorts of crazy things. So that's what I mean. It was a continuing pantomime in the sense that I was kind of finding my way. What was the possible way of breaking down this barrier? So I was extremely fortunate, no question.

L- So you've gone to the US, you arrived at the airport to the news that John Miller had passed away. I think you had said last time you literally found that out when you got to the airport.

O - I went to the Department, of the university, and his widow, Laura Miller, and four kids were there, in tears, wanting to be present because they felt that it was a credit to her husband that somebody was coming from outside of the states to seek his supervision. And so she was kind of teary and grateful and all that sort of thing, and you know, she was very hospitable for the first month or so. But I mean it was a tragedy for them, I mean just total desolation and I wondered whether I should be actually getting back on the boat and going back to the UK. But these people that I mentioned, Larry Lustig - Larry Lustig wrote about the alluvial fans of Death Valley. Larry Dingman is the author of a famous hydrology text, and Jack Schmitt really was quite famous.

L - So these were your cohort?

O - These were my cohort. And so they said, "You know, we've got to pull together. This is a disaster. John Miller's death is just a disaster. We are hoping that Luna Leopold will accept the offer to come.". But it turned out that didn't work out because he just got offered the Director of the Hydrology Program [at the USGS]. And that's another link - why he was looking for field assistants through the Harvard grapevine, because he was himself a graduate of Harvard and the University at Harvard was very keen on being associated with him. And Miller had been an undergraduate elsewhere but was a graduate student at Harvard.

So the question about William Morris Davis really didn't arise because these four individuals that were part of my peer group and my supervisor were almost exclusively concerned with quantitative physical reasoning and they had no interest in William Morris Davis. And initially, I crudely rejected William Morris Davis as well. Because I mean, and again, Dick

Chorley was very, very sceptical about anything that William Morris Davis said. He said "We've got to kill that before it overtakes us.".

L - Okay, so for context, William Morris Davis had been at Harvard and he had founded the American Association of Geographers, and he had a very strong legacy at Harvard, I would assume, so I'm actually surprised to hear that they had dissolved the Geography Department in 1954. Was that a reaction to William Morris Davis or do you know?

O - I hate to say it. There was a scandal. Homosexuality had gone rampant. Coming from King's this didn't surprise me.

L - In the Geography Department?

O - In the Geography Department. There was a guy called Erwin Raisz who was a cartographer, who was still hanging around the department when I got there, and he told me all the sordid details. Okay, this is not official. It's not in the literature officially. It's recorded in the literature as being the ambition of the Dean at that time to actually make a cut in the program, and this was the opportunity for him to do it because of this scandal. And I think that was the motivation of the Dean, but the substantive reason in the context was that the department was being scandalous in society. Even Harvard was very slow on new sexual ethics.

L - So they dissolve the department and let the faculty go or the faculty were reassigned?

O - The faculty were reassigned, and some of them went to the school of Urban Design, which was a new creation. And of course people say that was a great thing because that was much more active than the Geography Department was anyway. There is a person who had carried on the William Morris Davis tradition, doing extensive fieldwork, who might have rescued the situation, but he died at the exact moment when the department was cancelled, and that person was Kirk Bryan. And the thing Geology Department inherited was the Kirk Bryan Library which was a huge collection of all William Morris Davis' materials and Kirk Bryan's stuff and I think it's still available as a separate library, but possibly it's all been folded into one by this time.

L - So when you were in geology, there was basically no relationship to William Morris Davis' legacy at Harvard.

O - That's right. That was a remarkable thing in retrospect. But I mean basically the umbilical cord was cut through my relationship with Dick Chorley who'd already been under the influence of Columbia and Strahler, and he said that Davis was no good, so Dick Chorley said Davis was no good, so Slaymaker said Davis was no good. Which I mean I regret now, because obviously there's a huge amount of wisdom in Davis' work. But when you're in the middle of a quantitative revolution, yeah, you can't stick with the old guys.

So you ask about my experience at the USGS.

L - How did you secure position at the USGS?

O - On completion of my masters at Harvard, I had two options: A) return to the UK or B) stay in North America until the end of September. But my fellowship had run out. And I had no money. Through the good fortune of timing, the chief hydrologist at the USGS, Dr Luna Leopold, was looking for promising graduate students to assist with his so-called Vigil Network. This was a national network of gully and river channel sites to become monitoring sites for landscape change. One of the departments that he looked to for assistance was the Geology Department at Harvard, and I was fortunate enough to be chosen for a six-month assignment that involved flying into the Vigil sites in Wyoming, Montana, Idaho, Arizona and California, as part of my job, and spending a week at each site making measurements under the direction of Dr Bill Emmett, and from time to time, Dr Leopold himself. In between field visits I shared an office desk with Drs Reds Wolman, Walter Langbein, and amazingly Brigadier Ralph Bagnold in Washington DC. This was a fantastic job. I thought that I'd died and gone directly to Heaven.

L - All of these people - you had been presumably...

O - Soaked in through Richard [Chorley]. Yeah, so it was a it was just an extraordinary thing. Dr Leopold employed a number of geographers in the 1960s including, for example, Mike Kirkby and Tom Dunne. He gave each of us a number as a member of his team. Luna was River Boy Number One. Reds Wolman was River Boy Number Two. Bill Emmett was River Boy Number Three. Mike Kirkby was River Boy Number Four, even though his slopes are the reason he's famous. I achieved the enviable title of River Boy Number Seven. As seven is a perfect number, I said thank you very much.

L - What was your experience with, and impression of Luna Leopold? What was your job at the USGS?

O - Well, of course, I'm highly biased here, as in all my comments. Luna Leopold was a charismatic individual of Spanish and German ancestry. He displayed all the leadership qualities associated with those traditions. There's a county in New Mexico called Los Lunas, which is his family - they're originally from Spain - that gave the name to the county. Vision and determination to achieve change were his leading characteristics. His friends sometimes derided his lack of mathematical sophistication. 'Non-mathematical' was his longtime-colleague and friend Dr Walter Langbein's comment. But his intuitive skills were brilliant. Because I happened to be working for him at the time, he asked me to write a critical review of the manuscript for his paradigm-changing book "Fluvial Processes in Geomorphology" [Leopold, Wolman and Miller, 1964]. The many new insights were transformative and guided much of my subsequent thinking.

L - So that book would have come out in 1964, so this would have been....

O - 1963. From April till September. I was working under him.

L - And you read the draft of Fluvial Forms and Processes.

O - Yes, I read the draft. I mean, I haven't said much about that, but it was an amazing experience, because I had no idea - literally no idea - of the range of stuff that I had missed. And of course it's also curious in a sense that the narrowness of most geomorphologists at this time is something that is quite different than the range that was in the book. I mean there are better books on fluvial processes in geomorphology that have come out, but at that point

it was still linked with the whole range of geomorphological problems. Anyway, Luna was a hard taskmaster, but fair in every way as far as I can recall. He would entertain in the evenings in the Wind Rivers or wherever we happen to be, with his guitar. Did you know that he sang his presidential address to the Geological Society of America?

L - I did not know that.

O - Very, very interesting. It's the sort of thing that no respectable Anglo would even conceive of.

L - What were the predominant geomorphic concerns of the USGS at the time?

O - Well hydrology was the recently discovered solution to all geomorphological problems, and Luna Leopold controlled the purse strings for several decades.

L - Hydrology as the solution - was that because of Leopold, Langbein and that crowd and their training in, essentially, engineering?

O - Yeah, yeah, basically that. I mean Horton was the inspiration.

L - So was it a bit of a hammer and a nail kind of situation do you think? They just had this skill set?

O - Well, the other thing was that Luna discovered when he was appointed to that position, that there were all these data lying around in the office and nobody was using them. So there was a necessity to justify the data. So his first project, which I was partly involved in, was examining the rating curves for all the sediment monitoring stations in the States. And he said "Look, you know, we don't know anything from these derivative discharge numbers. We need to know what the rating curve was doing. Was there actually net change in the actual position of these gauges over time?". And of course there were several papers that were issued on that. So it was his sense of wanting to change this rather old-fashioned organization which was massively powerful. But in a way it was only just in time because there were subsequent quite critical reviews of the state of the USGS, and for a while there it looked like it was going to be canned all together. So that's my very simple point - that hydrology was king, and it had a huge impact. People don't sort of realize, I think in general, how radical this was. Cause we didn't know how to do analyses of hydrologic frequency curves and so on from the traditional geomorphology.

L - They would have been doing rating curves within hydrology and hydraulic engineering for a long time, so at the time you're saying there just was no training of geomorphologists in hydrology, right? So bringing those two together was important.

O - Yeah. So for example as part of my Masters course work program, I took courses at MIT because of the basic engineering that I hadn't had from either the Geology Department at Harvard or the Geography Department at Cambridge or anywhere else.

L - So after the USGS you jumped back across [the Atlantic] with your BTA. And why did you leave the USGS?

O - Well I didn't have a choice really. I was a lucky to get into it. It was a contract. So Dick Chorley had promised me support when and if I were to return to the UK with my BTA degree. I was able to pick up a two-year Fellowship from the Department of Scientific and Industrial Research at Cambridge. And at all events the contract with the USGS was a six-month terminal position. So I had all this remarkable field experience and the stimulating company of Leopold and his colleagues which I then transferred to Dick, but to my surprise he knew all about it! So I thought I was coming as a really valuable graduate student, but he of course was ahead of me.

L - Having been from the Columbia School himself.

O - Yes. So I mean although I followed his every word as an undergraduate, it is amazing how little I knew of his actual series of experiences. So then I had the privilege of meeting all of his friends. After completion of one year of the fellowship, I needed to start instrumenting field sites in central Wales. In order to do so, I needed two things. A) I had to learn to drive a car. We never had a car in my family - my parents never did. And secondly, I had to find a job. Even though I was enrolled in a PhD program, there was no alternative.

L - Because the fellowship was running out?

O - Yeah, I could have had an extra year on it, but it wouldn't have been adequate to get me to the field site. And so I just used one year of the of the two-year Fellowship.

L - You say the fellowship wouldn't have been adequate to get you to the field site. It wasn't enough funding? So you got a job to fund your research as well as your salary.

O - That's right. At the princely sum of 500 pounds a year. So less than a thousand bucks a year, which was even so more than my father was getting at that point. So it was just unbelievable - all this is just kind of remarkable. The whole thing was, again, magical. The Department of Geography and Anthropology at the University College of Wales at Aberystwyth was conveniently close to my chosen field area, and Professor **Emrys Bowen**, of Celtic Saints Fame, offered me a job as an assistant lecturer at 500 GB pounds a year, and this enabled me to survive, and eventually meet my wife-to-be. Two years of engagement in order to try and get my PhD finished, but we still got married before I finish my PhD - just couldn't hang on any longer.

L - So, what people or ideas really excited or influenced you during this period?

O - Well, no one at Aberystwyth, I would say, but the position gave me the opportunity to attend some conferences, the IGU in particular where Anders Rapp from Sweden impressed me, and encouraged me to reinforce my fieldwork. And of course Stan Schumm's presence - he came and looked over the field area and made some suggestions about how I should go about this whole program.

L - And did he come through your connection with Dick?

O - Yes. So Dick was receiving all these friends back from the States and he was supposed to be showing them the UK, but he used his PhD students to do the showing. Which was a great thing, because he otherwise wouldn't have had the same sense of interest. So yeah, and another person who influenced my thinking was Heinrich Jäckli in Switzerland. The

correspondence in that case was between Dick Chorley and Heinrich Jäckli. Do you know the name?

L - I don't.

O - He was a geological engineer at Zurich, and he actually published the first sediment budget study in the world before Dunne, Dietrich and all that stuff. And his thesis is a remarkable thing. It suffers from some of the same problems as my thesis did in that, you know, all the sampling design was interesting, but the methods for measurements were all really inadequate.

L - What do you mean by that? Just crude?

O - Crude, yeah. Basically Heath Robinson style. Yeah. No continuous measurements of things. But the ideas were absolutely enunciated for the first time by Jäckli.

L – Then you made a big move to the University of British Columbia?

O - So I met my wife at the railway station in Aberystwyth, and we clicked and we got married in 1967. And we had our first child in ‘68. In April of ‘68. And then we were on the boat to UBC on June the 29th. No on the plane. Sorry on the plane to UBC on June 29th, ‘68. It was dramatic.

L: And so how did that connection to UBC come about? You talked before about Mark Melton.

O - That's right, but he never even suggested that there might be a job. And when I accepted the job, I assumed that Mark Melton was still at UBC. But then I discovered that I was being appointed to replace Mark Melton, who had resigned in disgust at the state of the department.

L - Okay. So Mark had left by the time you got there.

O - That's right.

L - So Mike Church would have finished his PhD before you got there?

O - No, no.

L - Okay. So Mark left before Mike finished his PhD.

O - But Mark of course had permanently marked Mike's career. And one of the reasons that Mike came around to see me very, very soon after I arrived there was he was grousing, you know, as he commonly was, about the state of the administration at UBC and you know the prime example was "Look Mark Melton resigned, what better evidence do you have that this place is corrupt and unmanageable?". So I said "Well I did know Mark Melton, but I had no idea that he had resigned.". So it was a kind of a funny circumstance.

L - So you ended so you ended up in British Columbia.

O - I got a phone call from Lou Robinson, the head of the department at UBC's Geography Department.

L - And he rang you up at Aberystwyth?

O - He rang me up in a village outside Aberystwyth where the long-distance telephone connection was quite difficult, and how he ever found it, I don't know. But he entertained me for an hour and a half with the offer of the job and said what a great job it was and how there were so many wonderful people at UBC and so on.

L - How did he decide on you, do you know? Is that through Dick as well?

O - Well, he'd read some of my papers, and there was a connection between Emrys Bowen**,** the head of the department, and Lou Robinson. So there was a recommendation - personal at that point. And when he said that "The salary, I'm afraid is only ten thousand dollars a year.", I nearly fell off my stool. I said to Margaret, "look, I said, we've said we're happy here at Aberystwyth, and think we could make a very good life here, but we're never going to see $10,000 salary a year, anywhere! I'm not sure what we are going to do with it, but presumably there is some way of spending $10,000 in a year.". And the one point was interesting which relates to my sense of guidance in a situation like that is that we had debated before investing in a house at this village in Wales what prospects there might be of going somewhere else. And I said, well if there were an offer from the west coast of North America, I would certainly have to look seriously, but that is so unlikely that we should go ahead and invest in a house here. This phone call came six weeks later, and it just seemed providential. And I still believe it was. It seems to have worked out all the way around.

So then on June 29th '68, my wife and our three-month-old daughter and I arrived at YVR. We knew no one in BC or Canada, and for me it was easy because of course I was immediately surrounded by colleagues, some more attentive than others, but for Margaret with the responsibility of the child, it was really pretty devastating. Took her completely by surprise. Although she went with enthusiasm and great courage. It was pretty devastating. And so this was the second kind of, well, the third challenge to my views on family in the sense that having said that about what happened in Wales, and having said about what were the challenges here, at each step the family unit has supported me and it's been just one remarkable thing after another. So again, it's a privileged life, and I can't be more grateful.

L - Which, of course, answers the last question about family.

O - Yeah, and how they navigated my changing career. We had three more children in quick succession. And by the time the fourth child arrived, she was sort of the immediate guardian of the rest of the kids. So I was protected by that in the sense that I was not in any sense inconvenienced by the presence of the family. In fact, it simply reinforced my ability to carry on. But that's something that, you know, it's not an easy thing to acknowledge and it's not always the way that families evolve, at this point - particularly at this point. So I remained at UBC for the rest of my career.

L - Can you talk about the major forces, personal, disciplinary, departmental, environmental, social, that shaped your career and how your interests evolved in response?

O - So J. Lewis Robinson is much maligned by our distinguished researchers, because he did no research. But, again, he operated a department that was very family-oriented.

L - You would say that was quite a theme of how he ran the department?

O - All new faculty members and senior faculty members were invited to his home for parties. And that was something that has completely disappeared except for a single Christmas bun fight. So, what I give him credit for is that he instructed me to develop a course on environmental change, and that was visionary.

L - Do you know what led him to do that? I'm thinking about British Columbia in - that would have been ‘68. So forestry's obviously quite active. Mining, urbanization...

O - Not a soul was protesting.

L - So the environmental consciousness hadn't really evolved?

O - Somehow or other the Columbia River Treaty was a sell off of water to the US. The US thinks that they were gypped, but actually it was much too cheap of a deal. And of course at the moment, the thing is being renegotiated with a lot of difficulty. But the particular point at which I noted the problem was the construction of the High Ross Dam to increase power supply for Seattle. And that was something that we did protest. And John Hay, climatologist in the department, and I had our first experience of intervening in a court case. And we didn't succeed in stopping it ourselves, but the whole thing got so much publicity by the time that it was supposed to be built, that the public opinion was against it.

L - And this was shortly after you arrived?

O - Yeah, essentially ‘70, ‘71. Everything changed in ‘72, because the first environmental assessment guidelines - Federal - were published in that year.

L - The first ever?

O - The first-ever in Canada. And Rachel Carson's impact was taking effect. I know it was ‘62, but it really hadn't hit BC. David Suzuki was on his platform. He was fired from his job because he was paying more attention to public science than to teaching his students.

L - Fired from his job at UBC.

O - Yeah. But he was courageous and he's proven to be incredibly effective.

L - And in that context, Robinson asked you to create a course on environmental change.

O - And he was undoubtedly influenced by Ross Mackay, who he essentially worshiped, I would say is the word, and he would have asked Ross for advice. Ross never wanted to get involved in any administrative details, but that would have been - I think - the source. But also he had this general concern about Geography influencing policy as something he wanted but couldn't really pull off. Now, John Chapman, who became the next head of Department

after Lou Robinson, had a huge influence on public policy and was chair of the Natural Resources Conference several times in Victoria, and Walter Hardwick who was an urban geographer who led the radical Reformist Party in Vancouver, was responsible for the whole design of the False Creek development - the most influential Geographer in Vancouver's history in terms of the face of the landscape. These two would also have been influential in saying " you know, we've got to have somebody who's interested in environmental change".

Well, I didn't know what was to be taught in environmental change, but I mean I taught geomorphology in the Quantitative Revolution. I gradually realized that I had to shape up, and well, early on I created the BSc program in 1971, for which I take credit, but also some of the difficulties that arose with it. But nevertheless, that was my job, with Mike helping nobly in spite of his not wanting to do any administrative work. And I started the first field program in the department, again with Mike's assistance. But the first year when we ran it, Mike was marooned on Baffin Island.

L - Intentionally?

O - No, no, it was a genuine emergency. And so I had to run it on my own. That was quite a challenge. We had 12 students, all keen on this great new program. But it was inspirational, because it worked very well. And so there was this attempt to bring the department into the 20th century, I should say. Not even the 21st. So I was, in a sense, at the cutting edge, but also I was very modest in my attempts. I didn't have the courage of a Suzuki to engage, or the courage of a William Rees. Bill Rees is the author of the ecological footprint idea. So he and his graduate student made considerable noise and he was almost fired because of the amount of disruption it caused, and he said essentially our ecological footprint requires at least three more planets to absorb its impact sustainably. But all of that, of course, was of help to me because students were starting to stream into environmental interest.

So, at the same time, I should record my interest in a new initiative on the religious front. The founding of Regent College in 1970, which is a Christian graduate school for people who have not had upper-level instruction either in theology or in religion. And this was the idea of a man called Jim Houston, who was a Geographer, who was also appointed as Adjunct Professor in our department at the same time as I arrived at UBC. And he was a Geographer who I knew from his time at Oxford when I was a student at Cambridge. So again, there was a kind of a network thing there, and that college has had a considerable influence on my thinking. They were essentially working on [Michael] Polanyi and his approach to realism and the abandonment of naive realism. And I think one of the things that can be said, although a lot of physical geographers reject this idea, is that we were really embedded in not just realism, but a naive realism, a non-questioning realism. So important was the quantitative revolution in our thinking that only things that could be measured seemed to have any importance. And whilst this certainly was positive in many ways, it also had this downside that one essentially cannot talk about metaphysics because it's just not measurable. So that was an interesting thing, and Regent College took off.

L - Can I just ask, is there an explicitly religious framing to Polanyi, or was that just a way into, again, for you, a little bit of that theme which seems to be reconciling faith with science?

O - There is no explicitly religious framing of Polanyi. His theme is that knowledge is personal. So the whole idea that knowledge is objective was totally wiped out by his

approach and it was widely accepted as a devastating thing. But physical geographers never have heard of the name Polanyi, because it never entered until Bruce Rhoads started thinking about the ontological and epistemological implications of realism. And it's not until you actually accept the thought that vision and ideas are at least as important as the phenomena that you measure, that you can start to really see any connection between religion and science.

L - And it's an idea that religious faith makes accessible?

O - And is consistent with. I think it's really a modest claim that it's consistent with [that idea]. It doesn't prove anything, but it asks us to examine the statement that only empiricism is valid or matters. So I was, in my attempts to develop the environmental theme, mired in a certain amount of naive realism and I was tending to teach it entirely from a physical perspective, which is what my strong suit was, and I realized that I was moving down a rabbit hole that really wasn't going to be in any way satisfying to my way of thinking. So that book [Polanyi, 1958], for me, was a breaking point, and then a structure for critical realism was provided by Roy Bhaskar [Bhaskar, 1975], who was a philosopher at the University of Edinburgh. And some of the values - not only his appreciation of ideas and thought in the world of realism - but his understanding of the hierarchical nature of much knowledge, essentially the way in which scale affects the nature of the problem, knowing and precisely identifying spatial scale, and to a certain extent temporal scale issues within the system of critical realism, which not all critical realism does. Critical realism is quite vague in some respects. Little bit like Critical Physical Geography - it's kind of all sorts of things. But this is interesting from my perspective now because I didn't realize this at the time in terms of how things were going, but the problems of the environment were not climate change, but people's greed and the capitalist and neoliberal system. So Naomi Klein puts this all out in an inimitable way in her most recent book 'On Fire' - is the concluding point really of that whole development. I never got to the point of expressing it in those terms. I was too conservative in my views, and the thought of overthrowing capitalism struck me as a little bit ambitious. And I still think that her solution is not satisfactory, but her analysis is brilliant.

L - And so your involvement with Regent College and the conversations that were happening there about realism opened you up to the idea of a situated knowledge, essentially. To what extent, just thinking about your time at UBC, did that way of thinking also come about from your relationships with human geography colleagues.

O - So basically David Ley, Trevor Barnes, to a certain extent Gerry [Pratt], have been very influential. I think that David Ley and Marwyn Samuels' 1976 Humanistic Geography was kind of epochal. And I have the highest regard for David.

L - And as a sort of reductionist post quantitative revolutionist, or maybe direct descendant of the quantitative revolution, did you find that there were tensions or a rift between human and physical geography? I think there is a feeling of that today. And so what was that like immediately after the quantitative revolution?

O - Well, I mean, I was attacked by a number of colleagues for establishing the BSc program, for example, and when I demanded a field vehicle, it was voted 15 to 1 against. So I had a certain amount of missionary work to do.

L - The other physical geographers also voted against it?

O - Yeah, well Mackay, because he did his work in the Arctic so he had no need of it.

L - And Mike?

O - Mike was not on the faculty at that point, and Mark Melton had disappeared, and the climatologists didn't need it. So it's one of my major achievements - departmental vehicle. It's now gone out the window.

L - So then how has your understanding of the BC landscape and geomorphology evolved over the course of your career?

O - Well, I think I'm beginning to map that out - the evolution of my sense of the environment being more than just physical phenomena. A sense of the connection between that and religious perspectives. Reading extensively in the philosophical literature, being told by my physical colleagues that that was a waste of time, which was really the break point and the starting of the crumbling of the department because from the point of view of the human geographers, the philosophical part is so much a major part of the work, so this then sort of became critical in the [GEOG] 500/501 [graduate seminars] kind of situation where it was impossible to get the graduate students to go to one course, and it had to be done in two quite separate courses.

L - So it was split after you arrived.

O - Oh, yeah long time after. Because Mike and I taught a form of [GEOG] 500 before there was any 500 general requirement. So we taught it for everybody.

L- Okay for everybody, so the human geographers as well?

O - Yeah, yeah. And that was, well that collapsed really about 1990, I guess, when Derek [Gregory] arrived and became quite strong in his feeling that it was inappropriate to keep the two together.

L - Inappropriate pragmatically or inappropriate philosophically?

O - Philosophically and otherwise, yeah. He is radically unhappy with the idea of disciplines, and feels that the whole of Geography and other disciplines are simply arbitrary structures and that really was not helpful to perpetuate. So at the time we were teaching a course together, he and I, and we had, I mean from my point of view, a really interesting time teaching the required [GEOG] 445, which was required for everybody. But by the time the BSc had become firm, there was no one in the BSc program who wanted to get involved in that, and then really the physical geographers in rest of the department and the environmental stream felt that the issues in the social side were somewhat irrelevant.

So in a remarkable way, I think, there was an incredible amount of convergence in what I was doing that didn't necessarily give rise to the amount of productivity that it should have done, because I was still having difficulty expressing all these ideas in a coherent way. And this accounts for the fact, or it's a certain part of the explanation of the fact, that my productivity since retirement has vastly increased compared to when I was in full-time employment. And it's partly because the picture is coming together.

L - Interdisciplinary work takes longer.

O - Yeah. Yeah. And geography doing what it's supposed to do takes a long time. I mean in so many ways Geography is the easiest subject to get into, but it's the most difficult subject to really do anything in.

L - Yeah. And do you think that the rejection of the human geography perspective by the physical geographers arises from some sort of impatience then, or the structure of the University that doesn't allow for the time?

O - I still think that most physical geographers don't realize how thin the philosophical basis of naive realism is. Because it seems to me that there's no sense of it being an important task to do, to think about ontological presuppositions. Part of the problem is that these long words get in the way. No physical geographers are prepared to take long philosophical words, although they accept complicated physical concepts and dig hard to understand the physical processes. But there's a real lack of interest in digging because I mean all the marbles are awarded for the ones who do the most reductionist science. So there's no incentive from the point of view of a young scholar for ranging over into the philosophical direction. I mean Mike [Church] is an extraordinary exception to all this and I regard him as someone who has been a personal mentor and critical friend from the very first year of my time at UBC. I mean, he's been putting in papers into the Kant and Leibnitz discussion that has been going on in some of the philosophical journals, which you know - Mike is just an exceptional individual in most respects. But that doesn't appeal to the person who, like Barbara Kennedy said, wants to use the Quaternary shovel or measure the discharge of a river. That just doesn't seem like time well spent.

L - This is maybe overstepping a little bit for what I wanted to achieve with interview, but I'm just reflecting on you reflecting on the way the environmental degradation problem is not an environmental degradation problem. It's a social problem. It's greed, it's capitalism. And so when I think about the last 40 or 50 years of work that physical geographers have been doing to deal with environmental degradation in British Columbia as a biophysical issue with these engineering-type solutions, what that has done is enabled the problems to continue because they haven't been dealt with as a systemic issue.

O - Yeah precisely. Yeah. Which is sobering. And I think that, well, it's a crisis, really. I mean the crisis is not climate change, because climate doesn't do anything by itself. I mean, we've reified climate. when in fact it's what we do. I mean, we can do things in relation to climate that are beneficial. Is that a priority? Sure it is.

L - So I would love to hear a little bit more about how these issues of environmental change have become quite pressing and they have become the tangible motivation for a lot of physical geography work. And in BC, I think of dams, I think of forestry, I think of Clayoquot Sound for example, and I wonder if you have any examples that you can think of that stand out as examples of the way these became important drivers of the science?

O - Well, I think it's the crisis of the scale problem - both spatial and temporal - that actually brings the issue home. Because every contract that one takes on turns out to be a different

scale than the previous one. It turns out that the precise ways of dealing with problems are directly scale related. And so it seems to me that the traditional response to the offer of a contract is "Gosh, well, there's a bit of money. Well, I'll do that.". But we're applying methods which, very often, are not scale dependent and not sensitive to this whole issue. So it seems to me that there's an underneath problem, not just that of exploitation, but it's a misapplication of the stuff that we do know. Because there's a real difference between the global environmental degradation problem, the regional one, and my front yard problem.

So, the issues that I have got involved in, well, the first one actually was the High Ross Dam, and that was a learning experience. But the whole issue of sediment control and sediment budgeting, and you know, the way in which the flooding has been tackled in the major coast mountains valleys - steepen up the thalweg so that the water can get out quickly - that kind of stupidity has led to serious problems. So a lot of the excitement of hydrology being the mechanism or the tool has got blunted by the fact that we screwed up along with the engineers by taking the same sort of thoughtless approach. I think that we inherited a frontier society. The pioneering attitude that everybody does what they can. You know, just complete freedom to dig out the coal and cut down the forest and so on.

L - Freedom and maybe even a sense of duty?

O - Yeah, yeah. And I think it's not really until the reality of the First Nations presence and First Nations knowledge, that's really made the link. Here is a massive problem that we have created by ignoring or assuming that they're a lower form of human being, which of course does relate strongly to religious perspective and the humaneness of our society. So it seems to me that's why we are waking up - that the First Nations have started to express themselves in ways that are uncomfortable, but very well based.

And one of the things that I find interesting in a more religious context, is that the lessons of the Old Testament and the Israelites' perspective on land are almost precisely the perspectives of our First Nations. And so, sophisticated scholars in our industrial Western tradition discard the Old Testament as being something full of irrelevancies, whereas in fact there's a link that I found in dealing with friends in the First Nations community, that that's actually something that they recognize. So it's not the answer to any specific problem, but it's a perspective that I think is helpful.

L - So we have talked about the rift between human and physical geography. We talked about that it exists, or the reasons that it exists, this naive realism and this lack of interest in engaging with the philosophical underpinnings of the discipline. Is there space for common ground to be found again?

O - I believe so, yeah. I'm very optimistic. Because basically when you boil it down, it's a failure of imagination. The search for truth seems to me to be absolutely central, and it's identical as a search, whether you're religious, or a scientist or both. And I see no conflict here at all. But I think those who insist on the separation of physical and human have some questions about the validity of each other's approaches and they can't make the leap. I mean, it's one of the big things that ecology has taught us more than our own discipline. Everything's connected. And the stupidity of a Trump - pardon my emotional outburst - is that he doesn't recognize that he is actually connected to the rest of the world, in spite of his wall. And I think that we, at a more provincial scale, do that by separating geography into two parts. And of course, I think that we never really separated into two parts. We've

separated into three parts. And it's the people who don't recognize the third part who have a problem, which is the environmental linkages. Which is social, ecological, physical, in every sense.

L - So the three parts then, are...

O - Human, physical and environmental.

L - And space for common ground is in the middle.

O - Yeah, and one doesn't expect that human and physical geography will be identical. But they can hold hands around the middle. Or hold middles by hand or whatever.

L - So one more question about your UBC professorial career, I suppose, is the demographics and the priorities of geographers and how that's changed over the last 50 years. We have a lot more diversity in terms of the demographics and identities of people who are practicing geography and also changes in the intellectual priorities as well. So I'm just wondering about your experiences and how these shifts have been received by the community within Geography, within UBC Geography, and how those cultural shifts that played out in your networks.

O - It's a big one. Well, there's been a lot of unfortunate events which derive in my view from a lack of mutual respect. They're not fundamental differences in their concern for learning or in their concern for making their work relevant, but they simply seem to me to put a barrier which doesn't allow for discussion.

L - Which events are you talking about?

O - I'm talking about the isolation of physical from human and, I mean, I don't like to make too many personal comments on individuals but I mean, some of our friends in the department and also in the discipline generally, are concerned to isolate their work from the rest of the discipline. That's because they, in many cases, the honest ones feel that's the only way to make progress in their more narrow field. and I can respect that. It doesn't necessarily mean that that the whole structure breaks down. So I think that we are now facing a global crisis. Everybody I think agrees to a greater or lesser extent. And that global crisis has to get people to respect each other if they're doing good work. I'm not talking about people who do shoddy work. That's obviously not helpful to anybody. So people's egos get in the way. And so much of this relates to not just fear of the imagination, but a narrowing of peoples' sense of what's possible.

I'm impressed by the theme of love of landscape, because that kind of has an emotional tone as well as a scientific tone. And it seems to me that that's one of the themes that has been popping up quite widely. To me, it makes a huge amount of sense that an affection for landscape is going to be a motivator in looking at long-term preservation of what we have or enhancement of what we have. The love of landscape involves the emotions, as well as logical analysis, aesthetics, and religion, and commitment to protecting and enhancing the created order - is one way of thinking about it. And if we want to find what is the driver of global, regional, and local change, then we have to really recognize that the human takes precedence over the physical. Straight up physical geographers sometimes don't like that idea. Because, well, I would say when I joined the department here, the physical was

perceived to be uppermost in its impact. And that's changed quite dramatically. But that's, you know, you start pitching one against another within a field - it seems kind of waste of effort and the problem is too big to get stuck on that one.

So I think the word ‘landscape’ is very important to me. More so even than environment, because it's an area that I think I've got some expertise in, and which does in fact have a major role to play in the overall environmental crisis. I'm not suggesting it's the only thing in town, but it does embrace the idea of connections and any attempt to understand place and landscape is always scale dependent. And that to me is the starting point for some humility.

And that's another thing that I think is important - humility. Well, I'm going to sound like Methuselah now, but one thing I found in the King's College context was that there was an amazing humility amongst people in their debates. And the fact that, you know, they embraced a newcomer first-year student with the Nobel laureates, with the way in which the traditions of the college were run themselves and so on - some of which are crazy - but the sense of community that was involved. There was no room for pride in that context. And it seems to me that a lot more, well, this is a value judgment which may be thrown over, but that a lot of reductionists are extremely arrogant. And I've certainly met modest reductionists too, so I don't want to make that generalization too much, but it does seem to be that pride is a problem. And we all think what we're doing is the most important thing in the world, and mainly it isn't. So that's where I come back to religious motivation, really, and the whole idea that there is a spiritual dimension which is active. For example, this whole impeachment of Donald Trump process has been very distressing. I've lost sleep over it, because, I mean, it just shows what you can get away with if you try. It's an extreme example of hubris and of arrogance, and the difficulty of actually nailing an argument with somebody who disputes the possibility of Truth. And, you know the motto of Harvard is 'Veritas'? So truth, yeah. So the latest Harvard Alumni newsletter talks about the sad point that 'truthiness' has become the motto rather than truth. And it's just a trite thing, but it's fundamentally important. I mean it's a trite statement but it's a fundamentally important issue.

L - Looking back, what have been the most productive and enduring projects or collaborations you've undertaken?

O - So I can list them first and then say something about them. Involvement with the International Geographical Union. Involvement with the International Association of Geomorphologists. Involvement in the inception and development of the Peter Wall Institute for Advanced Studies. The theme of global environmental change. And something which is less well known is my contributions to the emergence of quantitative geomorphology in Spain, Japan, Romania, and Poland during the course of my career. And finally these two books [Slaymaker, 2017b; Slaymaker and Catto, 2020] that have now sort of crowned my understanding of the state of geomorphology in Canada, which involve 85 mostly Canadian geoscientists that represent the current state of geomorphology in Canada. Then the work with Marc Tadaki and others on ontology and epistemology of Geography [Tadaki, Slaymaker and Martin, 2017]. That's a list. Sounds like a huge contribution. It's not. But they are the cornerstones of what I think I've achieved.

The IGU - there's a paper that I've produced on what the International Geographical Union has meant for my career and the huge respect that I have for that organization because it has kept Geography together and is continuing to prosper [Slaymaker, 2017a].

The International Association of Geomorphologists was partly my creation. And it does good things and bad things. It's not had the same impact as the AGU, for example. It's more like a domestic group of geomorphologists. But what that has enabled me to do is to influence the course of geomorphology in a number of different countries. So that I have been part of the initiation of geomorphological groups in those countries: Spain, Japan, Romania, and Poland, and they've recognized that in various ways.

The Peter Wall Institute has succeeded better than the Geography Department in holding things together. And so I've had more discussions inside the Peter Wall Institute about what geography and environmental change can be all about than I have in the [Geography] Department, which is unfortunate, because I think we tend to be more on the defensive within the department and more open when we're talking with people from the rest of the academy.

L - And do you know why that would be, or can you reflect on that?

O - Well, I think it's again a function of wrong motivation, that we're trying to hold on to a corner of the discipline as being somehow the be-all and end-all, when in the broader context it's a problem that is being tackled by most disciplines. And all disciplines are having difficulty with it. It's not as if it's an embarrassment that we can't give the final solution in Geography. The fact is that it's obviously something worth spending time on, both intellectually and emotionally. So, I find that, well, there are always abrasive people everywhere - even at the Peter Wall Institute. But by and large, I wander around amongst those people, I'm known as a Geographer who has interests in the whole range of things, and they listen, and I listen to them. I don't think you need anything better than that to define academia. So at times, because we are sort of a Cinderella discipline, we are more defensive inside the department and want to blow up our reputations more than is truthful.

These two books [Slaymaker, 2017b; Slaymaker and Catto, 2020] are for me a tremendous thing because of the fact that the case studies are from 85 of these Canadian Geoscientists, some of whom have embraced the idea that one needs to be a critical geomorphologist, as well as a critical physical geographer. Not all of them, but a fair number of them. And we do, in this book that's just about to arrive in the mail, talk about the relationship between indigenous knowledge and geomorphology, and the way in which concepts are expressed differently in Indigenous languages. Which to me is a huge step from where I was in 1968 when I arrived, thinking that only measurables were important.

The experience with Marc [Tadaki] and Yvonne [Martin], and Mike Church's involvement in that, and several of you, was a refreshing experience [Tadaki, Slaymaker and Martin, 2017]. It's amazing how recent it was. I mean, in my whole career its right at the dog end of the career. But it emphasizes the fact that there are new ideas in the younger generation that should keep old guys like me humble.

L - It's a real credit to Marc [Tadaki]'s vision for a reflexive physical geography.

O - Terrific. I can't praise him enough. I hope he'll use me as a reference some time.

L - I think it's easy to underestimate the impact he had on the department.

O - Yeah. Yeah. So I'm in general optimistic. I think environmental ethics is probably the key discipline that holds these things together. But the main point is that the ecological insight of connectedness and our scale problems are core. And they are further ahead, at this point, than they've ever been in the discipline and there's still some way to go. I think that's all I can say, really.

L - Yeah, so that answers what you think priority areas are for physical geography and geomorphology. So those are your biggest accomplishments or enduring productive collaborations. Could you reflect a little bit on any big regrets you have with respect to your career?

O - Yeah sure. A big regret is my inability to express my faith in the lectures in the secular university. I regard this as harassment in a broad sense. I'm not into litigation or anything like that. But I think we don't realize that secularism is itself a religion. And whilst it's successful in more cases than not, it is one of a number of options. And I was forbidden from talking about my faith in my class lectures. Now, of course in mentoring and in one-to-one relationships, I've done a lot of talking about religious faith. And I felt that there's been no hassle whatsoever about that. But from the point of view of the 10 to 12,000 students that I've lectured at, that's a profound regret. Because they don't know who I am, they have no idea. I doubt to them that's special, but for me, it's special. And you know, I still bump into students who are enthusiastic to see me. They can't remember my name and I can't remember theirs, but an incredible community exists in this region on which I've had some influence. But I think they missed out on the most important part of me.

L - So your regret is that they missed out on an element of authenticity?

O - Yes. Yes that really, in a sense, whilst I was perfectly authentic about my misguided emphases at the beginning of my career, I should have been able to somehow or other document a change in my perspectives over time, and that this would be more helpful to them than the idea that Slaymaker has his ideas and they're static and really he is part of this secular world that is Academia. So I've spent more time at Regent College for example, as well as the Peter Wall Institute. So in a sense, it's not secularism altogether because Peter Wall Institute is secular, but there's a greater freedom to talk about metaphysics of various kinds. I think we've shunted ourselves into a corner in physical geography, by pretending that one methodology, one epistemology, is adequate, and we don't want to talk about ontology at all because it just doesn't bear looking at.

L - If you were doing a PhD again now, what would you study with whom and why?

O - Charles Taylor or Margaret Sommerville. Environmental ethicists. They're both at McGill. They're brilliant - absolutely brilliant people. One is a Roman Catholic and one is Protestant, but that's beside the point. They are just illuminating and they write a lot of contemporary commentaries. You should come across them in reviews and so on because they write a lot. They have views on such things as the dynamic relationship that should exist between secular and religious communities, and particular challenges with respect to the end of life concerns, and the whole question of what are our moral obligations in issues of birth control, in terms of the existence of poverty, and these kinds of things, and the expression of this in the landscape. So they're ethicists primarily, which I think is consistent with what I'm trying to reflect in a small way in my career, even though I'm not an ethicist.

L - So I think we've more or less covered everything. Did you want to finish with any advice that you would think is important for students who are just beginning in geography?

O - This sounds like a ridiculous thing, but I'll say it anyway. Diversity and specialization have increased, but cohesion and synthesis have suffered. We have more brilliance, but also less disciplinary attachment. These are apparently contradictory things which I observe and the search for diversity does not necessarily lead to cohesion.

L - And you're talking obviously about intellectual diversity.

O - Yes. I'm not talk about cultural diversity, no. Did I say before that, you know, my observation of when I arrived in the Geography Department here, every single faculty member was an Anglo. So there were excursions into appointing Americans. And one of them, his parting words were "I don't fit, therefore I quit".

L - Mark Melton must have been American.

O - He was yes, but he wasn't here when I arrived. And these two characters were appointed after me, and they were appointed into an environment in which they were right - they didn't fit. There were all sorts of innuendos that people had with respect to their words, their accents, the way they conducted themselves. I mean, in some ways it was a more sort of privileged class than the King's College situation. Though that would be a silly thing to say, I mean the detail is not true. But I mean at least in the King's College situation, you knew it. It was expressed. At UBC, a little colony of anglophiles, each person appointed was almost with the same profile, from a sort of intellectual background.

Actually, I'm sorry. I did overgeneralize - Marwyn Samuels was an American. Marwyn Samuels was the person who created the Chinese Garden in Chinatown. Fascinating guy. Yeah, he eventually broke up with his wife and married this leading film star in mainland China and bought a medieval home in the center of Beijing at a time when it was illegal, but it's fascinating. So there was diversity there in that one, but he moved on pretty fast. So I think that's a somewhat frivolous observation, but it is real.

So the other advice is 'go with your instincts'. Don't be pulled by career opportunities because they'll be different by the time you graduate.

L - And don't reject William Morris Davis just because?

O - And don't reject William Morris Davis, because he was far more thoughtful than many of the quantitative revolutionaries. Did you ever read any of Barbara Kennedy's comments? She has a series of short articles in Progress in Physical Geography. Really, really, insightful comments. She was very to the point. I was her TA when she was at Cambridge. We had a love-hate relationship. Love because I admired her, and hate because she was very critical. But bright as a button. She sadly died very much too soon. But I think that's an example of someone who went with her instincts and most of the time was very good. Hit the soft underbelly of the discipline, which is the philosophical naivety of much physical geographical thinking'.

Works cited:

Bhaskar, R. (1975) A realist theory of science. Leeds: Leeds Books.
Leopold, L. B., Wolman, G. M. and Miller, J. P. (1964) Fluvial processes in geomorphology. New York: Dover Publications Inc.
Polanyi, M. (1958) Personal knowledge: Towards a post-critical philosophy. University of Chicago Press.
Slaymaker, O. (2017a) Physical geographer's understanding of the real world, The Canadian Geographer, 61(1), pp. 64-72.
Slaymaker, O. (ed.) (2017b) Landscapes and landforms of Western Canada. Springer International Publishing. doi: 10.1007/978-3-319-44595-3.
Slaymaker, O. and Catto, N. (eds.) (2020) Landscapes and Landforms of Eastern Canada. Springer International Publishing.
Tadaki, M., Slaymaker, O. and Martin, Y. (2017) 'Special issue: Changing priorities in physical geography', The Canadian Geographer, 61(1), pp. 1–148.