

# landmark

## CAMBRIDGE GEOGRAPHY

1919 – 2019





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## Inside



A Century of Teaching

4



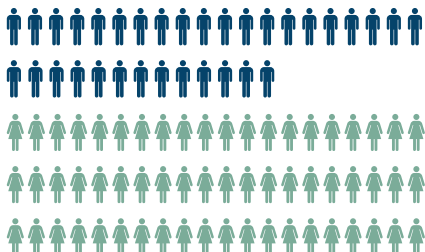
Border Crossings: geographies of class, gender, mobility and migration

30



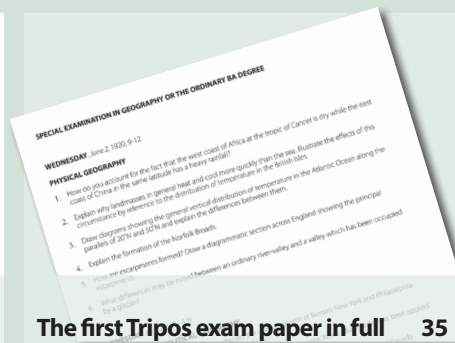
Towards a more critical Physical Geography

32



Student cohort:  
1919–2019 in figures

34

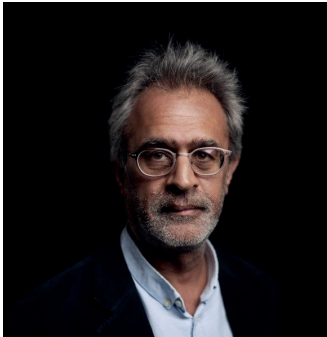


The first Tripos exam paper in full

35



# Dear all,



I am delighted to present to you this bumper edition of Landmark to mark 100 years of the Geography Tripos at the University of Cambridge. Read on for a fantastic feature by Dr Philip

Howell on the Tripos's 100 year history, and the characters, places and moments that have made us who we are today. We also have a chance to catch up on our wonderful Centenary Lecture Series, with articles by two of our Centenary lecturers- a great opportunity for those who were not able to attend to enjoy some of the wonderful insights that the Department has received this year.

It has been a remarkable, and deeply humbling, experience to mark 100 years of the BA in Geography during my tenure as Head of Department. The impact that this degree has had on those that have taken it, and that they in turn have had on the world, cannot be overstated. While we have been through a great deal of changes since those early years, we note proudly the continuities in terms of the breadth of our teaching, our academic excellence and the high calibre of our graduates. Cambridge Geography of the 1920s drew together globally-minded young people, with a keen interest in the relationship between place and peoples around the world, and taught them to question, analyse and assess through the timelessly effective combination of methodological innovation and academic rigour. The same can be said of our students today.

Over the course of our centenary year we have run a wide programme of events, engaging with alumni from across the globe. Our four centenary lectures by distinguished academic alumni Professors Linda McDowell, Harriet Bulkeley, Derek Gregory and Stuart Lane have explored the enormous potential of the Geographical Imagination. Our public panel event at the RGS in April with alumni Dame Fiona Reynolds, Belinda Gordon, Matthew Price and Dominic Waughray was an inspirational reflection on the 'Spirit and Purpose of Geography'. We hope the films of all of these discussions now on the Department's website will ensure many more alumni can enjoy these excellent events. We have also marked the event in the Department with a Centenary Garden Party with students, Centenary merchandise and a commemorative Travel Journal.

I have spoken with many alumni over the course of this year, and have been struck by the enduring legacy that Cambridge Geography has played in so many of your lives, whatever your career path has been. Cambridge Geographers have gone on to leading roles in global politics, economics, journalism, manufacturing, entertainment, academia, exploration, education, conservation and many, many other fields. Yet, whatever their calling, they are united by the breadth of vision, the creative and imaginative approach to problem solving and the practical energy to get stuck in that only a Cambridge Geography degree can bring. Once a geographer, always a geographer!

**Prof Ash Amin**  
Head of Department

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# A Century of Teaching:

## The Cambridge Tripos, 1919–2019



**By Dr Philip Howell,**  
Reader in Historical Geography,  
Emmanuel College



*The first cohort of Geographers in 1920, joined by a Sedgwick Museum bear (centre)*



2019 is the centenary of the full Geography undergraduate teaching programme at the University of Cambridge, the Geography Tripos. To mark the centenary, we have an opportunity to look back on many remarkable Geography lecturers and teachers, and on a course that for all the changes over a hundred years is still very recognisable and familiar. We briefly consider the early history of the Cambridge Tripos, before concentrating on the changing teaching programme and how it was experienced and examined, taking in some of the broader lessons we might draw from the centenary.

## The Early History of the Department and the Start of the Geography Tripos

**Geography teaching in Cambridge was properly established by the physical geographer Philip Lake, who introduced the Geography Tripos, and by the first Professor of Geography, Frank Debenham, who oversaw the move to Downing Place. Their achievements were consolidated by Alfred Steers, who played a vital role in promoting Geography in the colleges.**

The early days of the teaching of Geography at Cambridge have been rehearsed several times, not least by our brilliant and much-missed colleague David Stoddart, a man with an unparalleled understanding of the history of Geography, and, just as importantly, a keen eye to the absurdities as well as the glories of academic life. David emphasised the role of the Royal Geographical Society in promoting and funding Geography at both Oxford and Cambridge, but also just how far Cambridge lagged behind Oxford in the early days. Whereas Oxford gained the services of the political geographer Halford Mackinder, Cambridge appointed Henry Guillemard, by no means an academic of comparable distinction, and apparently lacking the energy and ability to promote the subject at Cambridge. The Cambridge geographer Rex Walford, another much-missed colleague, described Guillemard as ‘something of a broken reed’, which was about as critical as Rex ever sounded. It was hardly a good sign that Guillemard ignored the start of the Michaelmas Term in 1888, and he resigned before the end of the year was out. ‘I do not know that geographical teaching at the University lost



*Strong poses: the first Departmental lecturers Henry Guillemard (left) and JY Buchanan (right)*

much by my secession’, Guillemard remarked, and it is hard to disagree.<sup>1</sup> Nor was his replacement much of an improvement. The chemist, oceanographer and Arctic explorer John Young Buchanan at least made it as far as giving an inaugural lecture, in October 1889, but he too ended up resigning within a few years. Amazingly, the name of Peter Kropotkin was put forward as a possible successor, and it is pleasant to imagine what Cambridge would have been like had the Russian prince, apostle of anarcho-communism, and dedicated revolutionary, become the third Cambridge lecturer in Geography.<sup>2</sup> Cambridge instead acquired the services of Henry Yule Oldham: ‘a genial, unexciting man’, in David Stoddart’s dismissive estimation.<sup>3</sup>

<sup>1</sup> Cited in Michael E. Meadows and Tom Spencer, ‘James Alfred Steers 1899-1987’, in H. Lorimer and C.W.J. Withers (Eds), *Geographers Biobibliographical Studies* 34 (2015): 37-61, 39.

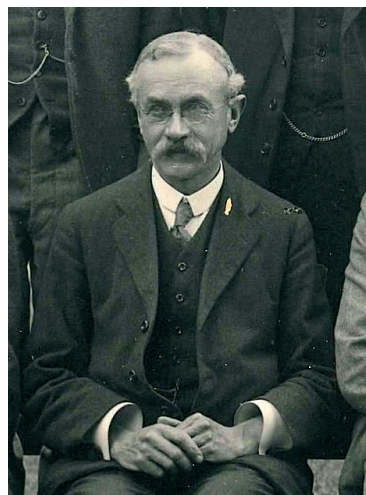
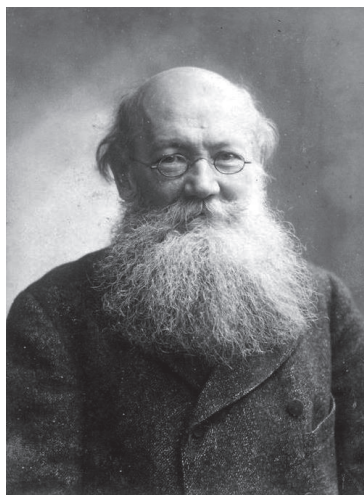
<sup>2</sup> We might still profitably reflect on Kropotkin’s vision of what Geography might be: ‘Geography must render, moreover, another far more important service. It must teach us, from our earliest childhood, that we are all brethren, whatever our nationality. In our time of wars, of national self-conceit, of national jealousies and hatreds ably nourished by people who pursue their own egotistic, personal or class interests, geography must be-in so far as the school may do anything to counterbalance hostile influences- a means of dissipating these prejudices and of creating other feelings more worthy of humanity’: Peter Kropotkin, ‘What Geography ought to be’, *The Nineteenth Century* V, 18 (1885): 940-956.

<sup>3</sup> This might indeed be too harsh. My historical geography colleagues Alan Baker, Iain Black, and Robin Butlin argue that Oldham has been much underestimated, given that he taught with authority on the history of exploration and discovery, and participated energetically on the scholarly circuits and in the Cambridge extension scheme.



In retrospect, Guillemard, Buchanan, and Oldham were three false starts. On the plus side, a Board of Geographical Studies was established in 1904, and a Diploma in Geography in 1907, with a two-part Special Examination leading to the Ordinary BA degree. But in Rex Walford's considered view, 'The genuine advancement of geography beyond the margin at Cambridge was delayed by at least two decades'. At this point, Cambridge at last found a suitable candidate and personality to advance the claims of Geography. This was the geologist Philip Lake (1865-1949), who after serving with the Geological Survey of India returned home to a career in Geography education. Lake was an ideal choice as University Lecturer in Regional or Physical Geography, a position he held from 1908 to 1927. During this time Lake published several textbooks, the dividends from which still fund undergraduate Geography prizes. A committed teacher and an able administrator, he is described by J. A. Steers as having 'a quiet sense of humour and a marked ability to present his material aptly', 'a most friendly and kind man, if rather shy, who was a good scholar and a first-rate teacher'. For all his diffidence, Lake was a fine lecturer, and he led the Department out of the various problems he had inherited.<sup>4</sup>

Most importantly, Philip Lake introduced the Geography Tripos. The Diploma had given students of Geography some recognition of their efforts, but they had to take time away from their principal subjects. In 1918, Lake proposed what is now the familiar two-part Geography Tripos, approved by the University on 31 January, 1919. Tripos teaching took place for the first time later that year, leading to a Part I that was first sat in in 1920. The first Part II examination was taken the following year. Geography had been taught at Cambridge in some fashion or other for 30 years by this point, but the significance of tripos status cannot be underestimated.



What might have been: Peter Kropotkin (left) Philip Lake (right) in 1926

Not long afterwards, Sir John Keltie, former Honorary Secretary of the RGS, declared that the Cambridge Tripos 'was certainly a triumph for the department, giving it an assured standing in the university on a level with other departments'.<sup>5</sup> It was a vital achievement, and Geography as a full Cambridge University degree was well placed to appeal to an influx of students following the end of the First World War.<sup>6</sup>

By the time the RGS ended its financial support, in 1923, Cambridge and Geography were firmly linked. A few years later, prompted by the comprehensive university reforms of 1926, Geography benefitted from the creation of the new posts of University Lecturer and Demonstrator. Of the 183 new University Lecturers established across the University at that time, Geography gained the services of the glaciologist and physical geographer Frank Debenham, the historical geographer Bernard Manning, and R.W. Stanners, an economic and political geographer. Alfred Steers, who had taken top honours in the very first Part II Tripos, was also listed among the 17 new University Demonstrators, progressing quickly to University Lecturer a year later on Philip Lake's retirement. The wider reorganisation of the University also had significant implications for women: a 'men's university although of a mixed type', as it had been memorably described, Cambridge finally admitted women in 1923 to the title of degrees, even if they had to wait until 1948 for true parity. Women could also become teaching officers, an opportunity taken up by several notable female geographers.

The second great name in Cambridge Geography was the young Australian, who had been appointed Lecturer in 1919. Debenham – 'Deb' to his colleagues – became in 1931 the first Professor of Geography at Cambridge, and under his guidance Cambridge quickly developed into one of the most influential departments in Britain and beyond. Much can be attributed to Debenham's leadership, inspiration, and charm. The cartographer Shirley Hewitt (née Carpenter) is particularly eloquent in her praise:

**To me he was the absolute personification of a professor, both from the human and the academic point of view. His vitality and enthusiasm affected all who came in contact with him and every member of the Department was stimulated by his ideas. He always had time to devote to any student and give encouragement and advice on all matters.<sup>7</sup>**

It is hardly a surprise that Debenham turned Cambridge into the great centre for glaciological research it remains. His own Part II lectures in the Geography Department constituted Britain's first ever course in glaciology. Taught by the geologist and Antarctic explorer Sir Edgeworth David, Debenham had been one

<sup>4</sup> 'Owing to the excellence of Lake's teaching, which was based on wide learning and a sound knowledge of the physical sciences and mathematics, geography made rapid strides, and when he resigned in 1927 it had become a flourishing department': *Nature* 164, 23 July 1949: 134.

<sup>5</sup> J.S. Keltie, 'The position of geography in British Universities', *American Geographical Society Research Series* No. 4, New York, 1921, 13, cited in Baker, Black and Butlin, *A Hundred Years of Historical Geography*.

<sup>6</sup> According to Baker, Black, and Butlin, *A Hundred Years of Historical Geography*, the Board of Geographical Studies attributed the post-war influx of students to the newly established Geographical Tripos.

<sup>7</sup> Gordon Manley, Brian Roberts, Shirley Hewitt, Eric Richardson, Hilda Richardson, 'Frank Debenham, 1883-1965', *Journal of Glaciology* 45, 6 (1966): 455-459, 458.





*The Geographical group of 1926, the first group photograph to include women. Frank Debenham and Alfred Steers are third and fourth from left, second row. Jean Mitchell, lecturer in historical geography, is second from right, first row*



*Frank Debenham in 1923*

of the geologists on Scott's last and ill-fated expedition to the Antarctic, co-founding the Scott Polar Research Institute in his memory, and becoming its first director in 1925.<sup>8</sup> Ten years later, Debenham oversaw the move of Geography to its current building, the former School of Forestry building at the end of Downing Place.<sup>9</sup> Geography teaching before this point was a moveable feast, sometimes taking place in the Sedgwick Museum on Downing Site, or in what is now the Music School in Downing Place, or in the Balfour Laboratory only a few doors down. But when the Downing Place building became available, Deb seized the opportunity to install Geography in the heart of Cambridge. It is not just the building that we owe to Debenham, however. He was truly inspirational, in Steers' opinion: 'one of the truly great and humane men of his time'. His words in praise of Geography and the Geographer are much-quoted, because they deserve to be much-quoted:

**it is a grand world we live in, full of beauty, interest and pleasing prospects. Who would not be a geographer with this whole, wide, vivid panorama as his field, places and peoples and occupations, and all the sights and sounds and smells that combine into an atmosphere peculiar to each part? ... His aim [the geographer] is to see clearly and to see whole; to climb the peak for the whole view, not to dally in the pleasant valleys below.<sup>10</sup>**

Alfred Steers is the third great name in Cambridge Geography. Steers succeeded Debenham as Professor of Geography in 1949, running the Department for nearly the next 20 years. Unlike his predecessors, who were geographers made rather than born, Steers wholly exemplifies the Department, having started with the old Diploma but graduating in the new Part II Tripos in 1921. Having made his name with that performance, Steers became a Department Demonstrator in 1922, a University Demonstrator in 1924, and a full University Lecturer in 1927.

Steers was a coastal geomorphologist of great renown, and his research is the start of what has become another great Cambridge Geography tradition. But he was also a leading figure in post-war conservation policy, and he managed to serve with distinction on all of the University bodies as well as those of his college, St Catharine's. As if this was not enough, Steers was extraordinarily active in the RGS, the Institute of British Geographers (he was a founder member), and the Geographical Association. To those of us living in less heroic days, it is a daunting record of service, and though Steers was a quite different figure than Debenham – being reserved to the point of near crippling shyness – the Department was equally fortunate in his election. Not least amongst his many achievements, Alfred Steers moved St Catharine's to its preeminent place in Geography colleges, most strategically through the Geography scholarship he

<sup>8</sup> Although technically a sub-department of Geography (from 1958), SPRI has effectively been a distinct institution since its foundation  
<sup>9</sup> 'After lurid and melodramatic events' writes Stoddart, and, in our ignorance, we have nothing to add.  
<sup>10</sup> Frank Debenham, *The Use of Geography* (London: English Universities Press, 1950), 167-168.



instituted in 1928: Catz was subsequently described as Cambridge's 'chief nurse of geographers'.<sup>11</sup> The example this set helped promote Geography in collegiate Cambridge generally.

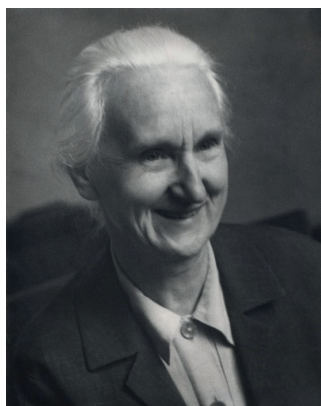
I am conscious of the fact that I have so far concentrated on three great men. It is worth noting at this point the remarkable women who were vital to the Geography Department in its early years. In the 1920s, when there were limited opportunities for women in higher education, Cambridge had no female professors or readers, and there were only ten female lecturers in the whole University. There were some remarkable opportunities during the Second World War, but only modest change afterwards. In the late 1940s and early 1950s, however, three of the eight University Lecturers in Geography were women. This compares pretty well to the University average of between 5 and 7% from the 1920s all the way through to the 1950s. The physical geographer and Girton graduate Margaret Swainson Anderson (née Willis) was the Department's first female member of staff, becoming a University Demonstrator

in 1928. She had been early on recognised by Frank Debenham as 'one of the most brilliant students of his department', and she returned to the Department as a Lecturer in 1948.<sup>12</sup> Anderson was not the only female lecturer, as Harriet Wanklyn had joined the Department in 1936. Harriet, more familiarly known as Hetty, married Alfred Steers in 1942, and taught in the Department until the mid-1960s. A year after Margaret Anderson's arrival, the historical geographer Jean Mitchell joined the Department as a lecturer; and, although she was not a university teaching officer, Jean Grove had returned to Cambridge as a college lecturer at Girton in 1953. It is salutary to look at the early staff photographs and see such a high proportion of women: this compares rather favourably to the Department in the 1960s, 1970s, and 1980s, when the Department typically had a single female member of academic staff, or none at all.<sup>13</sup>

<sup>11</sup> The words of L.P. Wilkinson, cited by Darby, 'Academic geography in Britain', 23.

<sup>12</sup> Mabel C. Wright to Miss Butler, 6 August 1944, Girton College Archive. During this time Anderson published *Geography of Living Things* (London: English Universities Press, 1951), a year before her untimely death.

<sup>13</sup> After Harriet Steers' retirement in 1965, Jean Mitchell was on her own, although her retirement coincided with Barbara Kennedy joining as a Demonstrator in 1968 for a five-year stint. Once Barbara Kennedy had moved on, the Department was exclusively male: from 1973 until 1981, when Susan Owens joined, there was not a single female member of staff. Susan Owens was the sole female voice in the Department for a decade, until Linda McDowell was appointed in 1992. There were, however, important women like Jean Grove or Lucy Adrian with college appointments. In subsequent milestones, Susan Owens became the first female professor in the Department, in 2004, and later the first female Head of Department.



JA Steers (above)  
Jean Mitchell (below, photo  
credit: Bertyl Gaye)

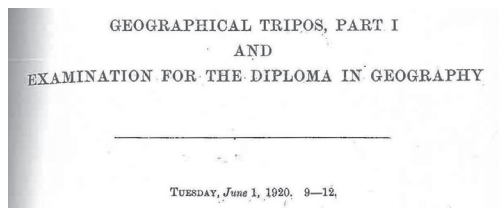


The Department in 1937, having moved to a the new building. Harriet Wanklyn is 4th from left, front row



## The Geography Tripos, 1919–2019

**The Geography Tripos has been frequently revised, and there have been significant changes in format and substance over the last hundred years. Even so, it can still be argued that many of the guiding principles remain – the combination of physical and human geography, the avoidance of specialisation until the final year, the importance placed on the acquisition of skills and techniques, and the emphasis on field work and original research.**



*The first Tripos exam paper: questions included: 'Draw a rough sketch map showing the coastal features of Belgium to the mouth of the Elbe and explain how they have been produced' and 'Discuss the contributions of the Dutch to geographical knowledge'*

Generation after generation of students must have left Cambridge with no clear idea of what a *tripos* actually was, apart from the fact that you studied it and eventually sat it. Simply put, Tripos means the two-part examination for which students sign up right from the start of their undergraduate career. To add to the confusion, however, the current Geography Tripos breaks the first two years into two parts, Part IA and Part IB, reserving the third and final year for a final Part II.

The schedule for the first advertised Part I lectures (1919–20) consisted of just five lecturers, the three geographers Henry Yule Oldham, Philip Lake, and Frank Debenham being supplemented by two from Anthropology and Botany:

*Political and Economic Geography* (Mr Oldham)  
*History of Geography* (Mr Oldham)  
*Physical Geography* (Mr Lake)  
*Regional Geography* (Mr Lake)  
*Cartography* (Mr Debenham)  
*Anthropogeography* (Dr Haddon)  
*Distribution of Vegetation Types* (Mr Tansley)<sup>1</sup>

<sup>1</sup> The anthropologist was the influential ethnologist Alfred Cort Haddon (1855–1940), at this point approaching his retirement; the botanist was the celebrated Sir Arthur Tansley (1871–1955). For information, *Anthropogeography* was understood as the study of the geographical distribution of humankind, and the relationship between humans and their environments over the long term; it recapitulates the concerns of the great German Geographer Friedrich Ratzel, and incorporated an interest in racial differentiation that was perfectly common in anthropology, but which sounds a disturbing note now. *Anthropogeography* later morphed into lectures on *Environment and Race*, but it disappeared from the lecture list fairly quickly.

<sup>2</sup> Professor Stanley Gardiner (1872–1945) was the Chair of Zoology in Cambridge from 1909 to 1937.

The first ever Part II course (1920–21) contained lectures in seven subjects, one of which was held in the Zoology Laboratory, with Stanley Gardiner, and with further contributions from the geographers Bill Thatcher and Bernard Manning:

*Trigonometrical Survey* (Mr Debenham)  
*Field Astronomy* (Mr Debenham)  
*Topographical Survey* (Mr Debenham)  
*Geomorphology* (Mr Lake)  
*Oceanography* (Prof. Stanley Gardiner)<sup>2</sup>  
*Economic and Commercial Geography* (Mr Thatcher)  
*Historical and Political Geography* (Mr Manning)

In 1928, the Board of Geographical Studies argued that the teaching programme in Geography should be extended over the first two years. The result was a more extensive Geography teaching programme, with new examinations for the students, the first Part I being sat in 1930 and that for Part II in 1931. From the Easter Term 1929, this also meant a Qualifying Examination at the end of the first year, consisting of just three papers: *The Physical Basis of Geography*; *The Elements of Human Geography*; and *The History of Geographical Discovery and Settlement*, with the reformed Tripos ending up with the following six compulsory papers:

*Physical Geography*  
*Economic Geography*  
*Historical and Political Geography*  
*Anthropogeography*  
*Regional Geography*  
*Cartography and Surveying*

The specialist papers at Part II were simply reduced by one, *Oceanography* being the sole casualty from the original Tripos.

### QUALIFYING EXAMINATION FOR THE GEOGRAPHICAL TRIPOS

TUESDAY, May 28, 1929. 9—12.

*The first qualifying examination for the Geographical Tripos. Students had to choose from essay topics including 'The Scientific Training of a Geographer', 'Climate as an Economic Resource', 'Deserts' and 'Christopher Columbus'*





Learning surveying skills on the 1938 Departmental trip to Tenby and Ingleborough

H. C. Darby on fieldwork. The caption for this image in the Department's college is 'The problem: Dr Darby'

These courses were inevitably very general. They served their purpose of introducing Geographers to the physical patterns and processes of the Earth, to the history of Geography and the historical development of human occupation of the Earth, and to contemporary human issues, particularly with regard to the distribution of economic resources and the variety of political systems. Substantively, they have a pronounced environmental determinist orientation, with *Regional Geography* being heavily slanted to physical geography, focussing as it did on 'the influence of physical conditions on the life of man'; *Economic Geography* was also interested in the 'development of regions of the world as influenced by position, climate, physical features, and economic resources'.<sup>3</sup> To this was added practical training in surveying and cartographic skills.

By the late 1930s, we find Frank Debenham lecturing on *The Earth* and on *Biogeography*, Alfred Steers on *Landforms* and on *Regional Geography*, Clifford Darby on the *History of Geographical Discovery and Settlement*, Harriet Wanklyn on *Elements of Human Geography*, William Vaughan Lewis on *Climatology* and (with Bill Williams) *Cartography with Field Work*. Unsurprisingly, given that Geography was a very small department, lecturers could be brought in from cognate disciplines, but geographers also seem to have filled in where needed. So, for example, the climatologist Gordon Manley or the surveyor Bill Williams might take on responsibility for the history of geographical exploration, or the biogeographer Margaret Willis for human geography. The structure and format of this introductory programme seems to have been general enough to include the talents of non-specialists. Indeed, it may be a mistake to pigeonhole such scholars. Not only were few of these early Geographers possessors of doctorates, they were also encouraged by the nature of the subject to be generalists, teaching across the subject, in ways that have now become far less common. One of the merits of the subject as constituted at this time was the encouragement to draw links between the different elements of Geography. Specialisation, even within the

broad divisions such as physical and human geography, had made only limited inroads in the first half of the twentieth century.

When it came to the 1952 Senate discussions preceding the 1950s 'Tripos reforms, the prospect of specialisation was zealously resisted, and in a familiar reflex by stressing the importance of regional geography: explaining areal differentiation through a combination of human and physical factors, mediated by time and history. The core of the teaching programme in Geography thus remained very stable: there is a notable consistency of purpose in the division of Geography into the three elements whilst all the time constantly stressing their interrelation. Physical geography (also known as physiography), historical geography, and (contemporary) human geography: these were the core elements for the Geography Tripos for generations. In 1950-51, the names are different, but the topics are very much the same: Vaughan Lewis, Ronald Peel, and Alfred Steers introduced students to *Physical Geography*, with Margaret Anderson contributing lectures on *Climatology* and *Biogeography*, Bill Williams continuing to teach *Cartography*, and John Paterson lecturing on



Not all hard work: fancy dress croquet match of 1953 (Rosemary Seaton)



*Geographical Discovery and Settlement*. This tripartite structure is even more pronounced when the second and third years was concerned. From the 1930s to the 1950s, the likes of *Physiography* and *Climatology* were faithfully followed by *Human Geography* (occasionally made just a little more specific as *Economic Geography* or *Political Geography*) and *Historical Geography*, with *Regional Geography* bringing up the rear.

The impression of continuity might just be an artefact of the lecture lists demanded by the University Reporter. In truth, lecturers had considerable freedom in choosing their topic, sometimes on the way to the lecture theatre: David Keeble recalls that on one occasion Harriet Wanklyn asked a bemused class what they wanted her to talk about that day, before settling on the theme of oil and the Middle East.<sup>4</sup> All the same, the lists suggest both a shared understanding of what every novice Geographer was thought to need, and a certain rote quality that might be instructive without being especially inspiring. What Geography gained in coherence, it probably lost in variety and the ability to adapt quickly to changing post-war academic fashions. Teaching in human geography tended to rely on pointing out how the nature of the physical environment and the distribution of resources constrained and guided human activity, but such environmental determinism, however carefully deployed or qualified, was increasingly out of fashion in the post-war world, which substituted its own shibboleths of Humanity ('Man'), Science, Progress, Development, and so on. Place description looked ever less defensible in its own right, as Benny Farmer lamented in his 1973 IBG Presidential Address. For all of the traditional virtues of old-style qualitative geography, it may well have felt shop-worn to undergraduates in the 1950s. In Anthony Young's recollection, for instance, the Geography Tripos in this period provided 'a lifetime's grounding in the essentials', but it was 'not very sophisticated, with some old style elements such as the History of Geographical Discovery and Exploration.' David Stoddart has written more caustically that though the Department of Geography was far ahead of its competitors in Britain it shared in the sad fact that Cambridge at this time was 'decorous, respectable and really intellectually somewhat dull'.<sup>5</sup>

Geography was a thriving subject, nevertheless, well placed to cater to a second post-war generation looking for a subject that was relevant and practical and from which careers might be spun. By the late 1940s there had been well over a hundred students taking the Qualifying Examination, nearly double the pre-war numbers.<sup>6</sup> When tripos reform came in the 1950s and 1960s, it was against this background of rising popularity and demand, not lack of interest. The changes that were introduced after the war introduced a Preliminary exam, but strengthened the two-year

Part I, Geography making the case to the University that whilst it provided a systematic and comprehensive grounding in the first two years, the opportunity had arisen for fully integrating physical, human and historical geography with regional geographic approaches.<sup>7</sup> In the final year, having gained a broad understanding of the physical basis of the Earth and the history and present use of its resources, students would be in a position to specialise. The revised Part II consisted of five groups of papers, the first, Group A, being compulsory, including an essay paper and two papers on the evolution and significance of geographical thought. Students could subsequently choose one paper from each of the four remaining groups, each with up to four papers on offer:

- B. *Geography of the Modern World*
- C. *Historical Geography*
- D. *Advanced Physiography*
- E. *Geodetic and Topographical Surveying*

There were further changes in 1956 and 1962, but perhaps the most striking feature from our perspective is simply the greater specificity of lecture and paper topics. As the 1960s wore on, we increasingly have lectures with titles such as: *The Physiography of Southern Africa*, *British Regional Physiography*, *Applied Physical Geography*, *Hydrology*, *Fluvial Geomorphology*, *Economic Geography: Agriculture of the British Isles*, *The Geography of Britain (Eighteenth and Nineteenth Centuries)*, *Population Geography*, *The Changing English Landscape*, and so on. Much of this change was instituted by the Tripos revisions of 1962, but an even greater reforming impetus came from the appointment of Clifford Darby as Head of Department after Alfred Steers's retirement in 1966. Darby brought in a much clearer structure with the familiar divisions now taking the form of economic, historical, and physical geography, with an equal balance of these papers in the groups at Part II. By the late 1960s, there were five groups of papers at Part II, the first four of which were:

- A. *Human Geography*
- B. *Historical Geography*
- C. *Physiography*
- D. *Geodetic and Topographical Surveying*

These were followed by an untitled Group E, largely devoted to the history of Geographical ideas and its methodologies.

These revisions are clearly substantial, and while they honour the spirit of the tripartite curriculum of physical, human, and historical geography, they do depart from it in terms of depth and detail. The late 1960s schedule of lectures runs to several pages, in contrast to the bare-bones summaries of previous decades. More than this, there is an evident change in purpose, with a recognition of the need for more rather than

<sup>4</sup> Interview with David Keeble, 11 June 2018.

<sup>5</sup> David R. Stoddart, 'Richard J. Chorley and modern geomorphology', in David R. Stoddart (ed.) *Process and Form in Geomorphology* (London: Routledge, 1997), 383-399, 383.

<sup>6</sup> See Baker, Black and Butlin, *A Hundred Years of Historical Geography at Cambridge*. An additional factor was the rising popularity of the subject. An earlier report, dated 24 February 1948, sought approval to increase the number of examiners for the Qualifying Examination from three to five as the number of candidates had risen from around sixty-five before the war to one hundred and twenty-one in the current year (1947-48).

<sup>7</sup> Though the Prelim did not matter in a formal sense, it was invariably regarded (by staff as well as students) as the equivalent of a full Tripos examination. As Tim Bayliss-Smith remembers of the 1967 Prelim, the colleges certainly took it seriously: 'if you did well you got a prize, if you didn't you got a telling off' (interview with Tim Bayliss-Smith, 20 June 2018). For many years there was also a translation requirement.



less specialisation. By the academic year of 1969-70, attempts announced in the old Group E to consider Geography's methods as a whole had been shelved, along with the surveying option in Group D. This meant that human, historical and physical geography were more than ever left to go their own ways, albeit with a somewhat ragbag group of topics shoehorned into a now revised Group D.

What is also obvious is the emphasis on quantitative techniques that was famously to revolutionise Geography in the rest of the decade and beyond. By the late 1960s and early 1970s, first-years were being lectured on statistics and quantitative analysis, by Barbara Kennedy and Dick Chorley, and on spatial analysis by Graham Chapman; a few years later Andrew Cliff would be teaching statistics and David Keeble locational analysis. These quantitative elements were incorporated, somewhat clunkily, into the venerable format of physical, human, and historical geography, with a regional emphasis and the practical skills elements in tow. We already have what would later be promoted as competing 'paradigms' in Geography: the change from a situation in which 'the implicit assumption was that the main purpose of geography was to describe the various cultural and physical landscapes of the world' to one in which 'Geography is now seen as having the objective of developing a series of laws, theories and principles concerned with the spatial aspects of human behaviour on earth'.<sup>8</sup> This was a distinct 'change of mood', in the words of Peter Haggett and Dick Chorley, who described themselves as 'Naïve, aggressive and carefree young geographers'.<sup>9</sup> Together with their even more junior colleagues David Stoddart and Chris Board, Haggett and Chorley brought the 'New Geography' into the Geography Tripos at Cambridge. Where this rubbed up against more traditional approaches and philosophies, there was bound to be friction. For Chorley and Haggett anything that was not systematic was merely idiographic. Out went Davisian geomorphology, but also the descriptive and narrative emphasis common to regional and historical approaches in Geography. On the other side of the fence, Darby defended both qualitative description and the importance of historical and regional perspectives. Others decried the lingering influence of 'Haggetry' (Benny Farmer's term) and the whole 'Chorley circus' (Alan Baker).

It is salutary to reflect on how the quantitative revolution made itself felt on undergraduates at Cambridge. David Keeble, who was an undergraduate in 1958 a few years before becoming a member of staff, recalls that Haggett and Chorley's approach to the subject, was startlingly unfamiliar: 'quite how it all fitted in was very puzzling to undergraduates like me'. We are particularly lucky that David Wright has left some lively recollections of Peter Haggett and Dick Chorley just before and just after their transformation to the 'New Geography'. Peter Haggett, before the quantitative

revolution, is portrayed as enlivening an otherwise pedestrian teaching programme:

**here was a young, handsome Geography we could all have as our hero! Exciting stories of travel in Brazil in the back of a lorry inspired us all! Every topic he touched, he brought to life, and thrilled us.**

In Wright's second year, a different Haggett emerged however, still compelling but now fully committed to a systematic geography. This Haggett (having become, in Wright's words, 'the prophet'), relied on 'nasty, complex maths' well beyond the capabilities of most of the undergraduate cohort: 'and we heard that truth was to be found in a "t-test", not in a colour photo, and "0.56" is truth, not the people's work in the photograph'. Wright's impressions of Dick Chorley are very similar. Chorley 'inspired us with great stories in his first year – we thought he was American, because he had brought an American accent back from Chicago. He even made "Earth Dams" really interesting! But he too became 'quantitative': hard to understand, and 'distant'.<sup>10</sup> Some students like Wright were driven out of the subject by the enthusiasm for quantification, either temporarily or permanently.



*Peter Haggett and Richard Chorley*

Nor did the relative decline of quantitative geography in the late 1970s and early 1980s presage a return to the older consensus. For no sooner had the language of quantification waned than the language of high theory took its place. The influence of social and critical theory provided a vital fillip to the discipline, and it is out of this intellectual ferment that some of British Geography's most important names – David Harvey for instance, or Derek Gregory, or Linda McDowell – emerged. Such developments again could not help but be noticed by the undergraduates. Here is, for instance, J.R. Benn of Giron, analysing Derek Gregory's landmark 1978 book, *Ideology, Science, and Human Geography*, for the CUGS newsletter. Taking five random samples of 200 contiguous words, Benn compared them to control samples from Peter Haggett's *Locational Analysis in Human Geography*, Clifford Darby's *New Historical Geography of England before 1600*, and John

<sup>8</sup> Norman J. Graves, Introduction, in Norman J. Graves (ed), *New Unesco Source Book for Geography Teaching*, Longman: The Unesco Press, 1982, xvii-xxii, xvii-xviii.

<sup>9</sup> Peter Haggett and Richard Chorley, 'From Madingley to Oxford: A Foreword to *Remodelling Geography*', In B. Macmillan (ed) *Remodelling Geography* (Oxford: Basil Blackwell, 1989), xv-xx, xvii

<sup>10</sup> Recollections of David Wright, Department of Geography archives. Wright resolved to avoid quantitative for 'real' geography: 'It took 20 or 30 years before I could feel confidently that I was not a dinosaur: Geography is more than numbers and formulae!' David Wright went on to become a beloved Geography lecturer in his own right, and his widely-published children's atlases have spread his passion for Geography around the globe.



Lockwood's *Causes of Climate*, demonstrating a massive preponderance of both long words and words ending with -ism, a conclusion triumphantly confirmed by the 95% significance level:

Work	Mean no. words with n letters			Words ending in -ism
	n=9	n=10	n=11	
Ideology, Science and Human Geog	22.8 (2.98)	12.2 (10.56)	6.2 (8.96)	1.2 (0.56)
Others	15.0 (14.8)	8.2 (5.56)	3.0 (1.2)	0.2 (0.16)

Less quantitative but no less creative, we might also cite this stanza from the same issue, which channels Lewis Carroll to register students' apprehension of the monstrously incomprehensible 'Greggy wok':

**T'was frumig and the structr'y Profs  
Confused verbosely through the land  
All waffly were the geogy books  
And hard to understand.**

Generations of students in the last few decades will probably sympathise: human geography, in particular, has become a testing ground for theory as much as a bank of expertise about what the world is actually like. The point here is not to critique such developments, however – they were for me as for many others a great inspiration – but simply to note that the turn to theory challenged as never before the consensus that Geography could be both differentiated into human, historical, and physical geography, but at the same time be put together again through shared history, common methodologies, and a focus on the region and the role of the environment.

Subsequent tripos reforms reinforce the impression that human and physical geography were increasingly specialised and distinct. A major change in the Tripos was brought in in the late 1970s, when the Prelim was dispensed with, and Parts IA and IB were added. The contentiousness of the Tripos revisions (first discussed in 1977 and 1978) have faded, but some members of staff were initially keen on a two-year Part II, something that had the advantage of greater choice, but gave up on strict progression over the three years. When a vote was taken in October 1977 on several alternative Tripos structures, eight staff were in favour of the old system of a Prelim plus Part I and Part II, and only three were in favour of Part IA, Part IB, and Part II. As the minutes of the staff meetings put it, in the diplomatic understatement of minutes everywhere, 'Opinion appeared to be divided'; only 'after lengthy discussion' did the March 1978 meeting conclude in favour of the new system.<sup>11</sup> Still, the IA/IB/II structure has lasted to our own day.<sup>12</sup>

These reforms are more significant than they may initially appear, however, and they set in motion

or made possible the relatively rapid changes that occurred in the 1990s and 2000s, changes that decisively depart from the traditional model. In the year 2000, suggestions were made that the three groups of papers at IB should be replaced with just two: a broadly human geography Group A and a broadly physical geography Group B. Still more recently, students have been asked to take fewer papers in total. Part II has ended up with students choosing four papers from a choice of 12, in addition to the submission of the dissertation. Part IB now requires students to take a compulsory Paper 1, plus a range of practicals and field projects and other assessments, and has dispensed with grouping altogether, asking students to sit three papers from a choice of six. Most dramatically, Part IA has gone down from five papers to just two, *Human Geography* and *Physical Geography*, with five practical exercises to be handed in during the year. There is further significance in these latest reforms: students are able, even in their first year, to concentrate their efforts on those aspects of human or physical geography that most interest or suit them. No longer is it necessary for first-year students to cover the entire range of topics, even if they have had the opportunity to be lectured in all of them. Thinking about the nature of the Geography course over the century past, this is not an exercise in tinkering, but rather one that reflects a considerable change in the Department's ethos.

These are major developments, and I have tried to bring out a significance that may not be readily apparent, even to those of us who were part of these decisions. But there is a danger too of being too dramatic about these changes, or dyspeptic. Every generation tends to think that their experience of Geography was somehow right and appropriate, even whilst reserving the right to voice sharp criticisms. There are in fact many things that have remained pretty constant, such as the mandatory papers of the first year, the structured choice of the second, and the free choice of the third year. Perhaps chief amongst these constants is the fact that teaching in Cambridge Geography has never been terribly prescriptive: lecturers have simply been given 'an immense amount of freedom' (in Alan Baker's words) to teach whatever they are enthusiastic about. Tim Bayliss-Smith, while regretting teaching chores such as aerial photography, also praises this liberty to choose what you wanted to teach:

**[the Department] has always been very liberal, in my experience; if you are doing the research you like to do and you can publish it then good, do it, and we'd try and weave it into the Tripos as and when we can. So I wasn't ever discouraged.**

Rather than being overly prescriptive, then, Geography at Cambridge has consistently tried to cater to the interests and enthusiasm of the staff, believing (perhaps idealistically) that the surest route to student satisfaction is the ability to convey that enthusiasm to undergraduates. Benny Farmer's defence of his opportunities at Cambridge, including the ability to set

<sup>11</sup> UOM, 3 October 1977; UOM, 2 December 1977; UOM, 17 March 1978.

<sup>12</sup> There were, however, important revisions in 1988-89 (first examined in 1990) when Part IB became a choice of six papers at IB from three groups, plus the compulsory Paper 1, and at Part II students would have a choice of five papers from 19 options, plus the dissertation. The number of papers required seems onerous, looking back, and a reduction in the required number of IB papers was canvassed in 1997.

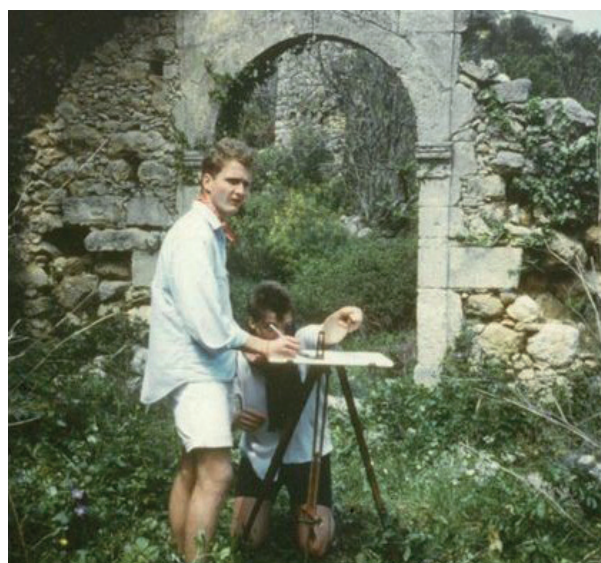


up the South Asian Studies centre, still rings true to me today:

**how fortunate I feel myself to be in this, as in so many other respects, to have been working in Cambridge: it is a mischievous and totally mistaken view that the Cambridge grove of academe is encrusted into rigidity. In setting up and running a Centre one must clearly seek and obtain the co-operation of scholars interested in the area concerned, whatever their affiliation by subject, department, or faculty. It is far easier to do this in a University which is, as mine is, still basically a community of free scholars, of scholars who are at liberty to associate themselves with the work of a Centre without entanglement in a hierarchical structure of departments under autocratic heads or bureaucratic machine.<sup>13</sup>**

It is precisely these freedoms that make possible the best kind of teaching that alumni will remember.

So for all the changes described above, it is possible to agree with much of David Stoddart's assessment of the Tripos voiced a generation ago: 'the structure of Cambridge teaching has held remarkably to the pattern established by the original Diploma in 1907'.<sup>14</sup> It can still be argued, for instance, that Geography at Cambridge values the combination of physical and human geography, avoiding full specialisation until a student's final year, and encouraging a wider understanding both of geographical issues and the nature of Geography as a subject. The acquisition of skills and techniques alongside the substantive knowledge is also a constant, even if surveying and cartography have been superseded by statistics and data analysis, interviewing and qualitative methods, and by problem-solving and presentation skills. The emphasis on fieldwork also remains crucial with regard to developing these skills, through field trips as well as in field research. Finally, the dissertation remains the greatest opportunity for students to pursue their own, original research. For all the reforms that we have observed above, there is as much continuity as change.



*Fieldwork through the years*

<sup>13</sup> Farmer, 'Geography, area studies, and the study of area', 3.

<sup>14</sup> Stoddart, 'One hundred years of Geography at Cambridge', 30.



## Teaching Geography, 1919–2019

**The Downing Place building will be familiar to generations of alumni, and the basic elements of Geography teaching have remained much the same over the last century. But some changes are subtle and significant: lectures have become more formal, supervisions less idiosyncratic. But the importance of personal influence and inspiration, particularly at the College level, remains as vital for today's Geography undergraduate as it ever was.**

Lectures remain the core of the teaching programme. Educationalists tell us that lectures are not an especially effective way of communicating information, and perhaps in another hundred years they might be considered entirely archaic, but for now they remain as important as ever. In the distant past, students were even expected to turn up for lectures, though attendance was not very successfully enforced:

**Compared with the English Department Geography was strict! We had to sign attendance at every lecture – though Mickey Mouse and Donald Duck were assiduous attenders. And one lecturer threw chalk at me when I dozed off in a plane-table demonstration – I'd covered all that stuff in my gunnery training!<sup>1</sup>**

Lectures are no longer compulsory, and they have not been for a long time. There will always be latecomers and no-shows, and some students who probably should have stayed at home. When it comes to lectures, students vote with their feet, even if this means not using them to walk to the Department. All the same, the lecture theatres in Geography will be more densely occupied than their equivalents on the Sidgwick site and elsewhere: things have not changed that much over the years. In years with large numbers – when we come close to the maximum capacity of 120 or so, the

main lecture theatre achieves a claustrophobic fug, particularly if students have rushed directly from the river. Undergraduate geographers are very aware that lectures – however lively, however dull – are the core component of their education.

Geography lectures have changed greatly, of course, in both content and delivery, aided by visual and other technologies that lecturers have contended with as much as commanded. Older alumni will remember lecturers struggling with maps, slides, and the overhead projector, though now the same might be said for the ubiquitous PowerPoint, while amplifiers and video projection are best left to the most accomplished or foolhardy. Efforts at livening up lectures have always been appreciated, however. From the perspective of the 1950s, David R. Wright remembers how much of a relief were any attempts at illustration:

**the tedium of words, words, words was relieved by the wonders of 'modern' technology – the slide-projector. The lecturer said 'Pring!' – and magic pictures appeared, to our great joy. Each lecturer then tried and failed to find the right switch to dim the lights – day after day, month after month. Only a 'new boy' – Dr Chris Board had troubled to work out how the switches worked. Eventually we decided that 'Pring' was not an 'Abracadabra' word – there really was a Mr Pring who sat in a cupboard quietly, until summoned with the magic word of his name!**

The same might be said for each subsequent generation, and if the IT revolution has made lectures somewhat more entertaining or easier to follow, lecturers are (occasionally) baffled by the opportunities. Students themselves probably always were more technically savvy than the people teaching them. Nowadays, lectures are even frequently recorded,

<sup>1</sup> Recollections of P. Bryan Enfield, Department of Geography archives.



*A lecture captured as part of a promotional film in 2012*



Gus Caesar (photos courtesy of St Catharine's College)

amazingly, even when students are in attendance. Given the hegemony of Power Point (other presentation programmes are available, if little used) students also have recourse to lecture material both before and after the lecture. Older generations are likely to be amazed at such service.

All of the recent changes suggest that lectures should in some sense be less important. But probably the opposite is the case. It is more not less incumbent that the lecture should offer something beyond information, and whilst entertainment is asking too much, something extra has to be provided. From days of the Dearing Report of 1997, when universities were reminded that learning rather than teaching should be at the heart of the educational experience, to a recently departed Universities Minister's annunciation of 'the age of the student', lecturers are expected to at least be able to communicate. Much depends, as ever, on the lecturer, and even with a whole bureaucracy of training and mentorship, standing in front of an audience of a hundred or so students remains a daunting task; all the more so since we are painfully aware that we are going to be rated later, and that we have to compete in real time with the opportunities provided by a good wi-fi connection. Lecturers need to reckon with the various demands on students' attention, in a way that was not the case in the past, when there was no inkling of university being a marketplace, and when undergraduates simply accepted that they had to work on their own to a considerable extent: if the lectures and the supervisions were not especially helpful, a student had to make up for it through independent effort. Lecturing in the past was by modern measures less 'professional' (for good or ill): thinking of the 1960s, Alan Baker remembers lectures as informal talks rather than formal presentations, and by that point if students didn't like a particular course or delivery, they simply didn't turn up.

It can hardly be a bad thing that lecturers have to pay more attention to presentation and delivery than

previously. Every alumnus will remember bouts of boredom. David R. Wright singles out for amazement the lecturer (it was Alfred Steers) who 'did what one would think impossible – he made the Scottish Highlands boring!' Many others have recalled that Steers was, through his shyness, difficult to hear, let alone understand:

**His lecture course covered an assortment of geomorphological topics. Being very shy he would not look at the assembled students but walk up to the lectern, gaze as a point above the back row, and, while we were folding up newspapers, ascertaining the cricket score, and otherwise still making a racket, would start, 'I want to say a few words to you today about hibbleobbledebobble' and turn to the blackboard. By the time we could follow things, a knowledge of the stratigraphic succession in the Middle Silurian was a prerequisite for appreciation of its finer points.<sup>2</sup>**

Steers was not the only lecturer who came across as, well, dull. The same could be said about Gus Caesar, another man who radiated warmth in the confines of his college but for whom the lecture hall was more of a challenge. 'Lots of basic information but not terribly inspiring' is David Keeble's pithy assessment, and Tim Bayliss-Smith concurs:

**Some lecture courses you could ignore, especially if they were lecturers you didn't like. Gus Caesar's 16 lectures on economic geography were extremely tedious, but if you sat through them and took notes you could get through the exams at the end of the year.<sup>3</sup>**

What is more, the post-war lecturers seem to have been formal figures: many of them eminent, but unless you shared a college with them, almost entirely distant, removed from standard communication channels. For David Wright, the lecturers in the 1950s ranged 'from excellent to (almost) abysmal. They all liked their subject, but we knew almost nothing about them as people. And they seemed strangely reluctant to talk about their adventures in far-off lands – that's what had switched many of us on to Geography in the first place.'

Lectures were appointed not because they lectured well, but because of their scholarship. This is still the case (though the requirement of sound scholarship has been supplemented by the ability to raise grant income, with intangibles such as public engagement thrown into the mix): teaching excellence is some way down the check-list. But whereas today's University has a raft of professional development programmes, and a system of mentorship, past colleagues were left to learn on the job. No colleague ever came to sit in on a lecture and provide advice, nor were students allowed to register

<sup>2</sup> Recollections of Anthony Young, *Semper Juvenis: Always Young*, 2016, pp.73-77. David Keeble recalls being lectured by Steers on the landforms of north-west Scotland with the help of 'very ancient, yellowing slides'; student numbers, he noted, soon dwindled to the occupants of the front two rows: interview, 11 June 2018.

<sup>3</sup> Interview with David Keeble, 11 June 2018 and Tim Bayliss-Smith, 20 June 2018. In fairness, like all of us, Caesar was capable of occasional triumphs: Bryan Enfield remembers that 'One of the best lectures in my whole life was delivered by A.A.L. Caesar on 'The Railways of Argentina', which he delivered without notes – and was rewarded with a standing ovation from his audience: recollections of P. Bryan Enfield, Department of Geography archives.



their satisfaction or dissatisfaction. Before he started at Cambridge Alan Baker turned to George Kitson-Clark's short but helpful book, *The Art of Lecturing: Some Practical Suggestions* (1959).<sup>4</sup> But for the most part, at least until the 1990s, it was sink or swim.

Students took this as read. Lucy Adrian, who went on to become a long-serving college teaching officer at Newnham, recalled that the lecturers were entertaining only in their idiosyncrasy: as she remarked, 'you would come sometimes simply to see if they fell off the desk'.<sup>5</sup> For Tim Bayliss-Smith, an undergraduate from 1966 to 1969, this was just the way it was. The lectures varied, but you just got on with it: 'You accepted it. You accepted that some were just going to read out a script and not show any slides, and that others were going to be much more lively and have much more illustrative material. Some would give you reading lists, some wouldn't. The supervisions were supposed to sort of catch up on the gaps or explore areas you were interested in'.<sup>6</sup>

There were some notable exceptions, naturally, as even the severest critics would acknowledge. Thinking of his experiences as a student in 1941, and then immediately after the war, Dick Grove singles out Gordon Manley as an entertaining lecturer, and Debenham too. Debenham was a man who 'had that rare gift of being able to instruct as well as to entertain', but he was not the only one.<sup>7</sup> The historical geographer Jean Mitchell was remembered as capable of giving 'excellent, inspiring lectures, with a clear sequence and structure'.<sup>8</sup> Terry Coppock writes of Mitchell that his abiding memory is of 'a tiny bird-like figure, with silver hair, perched on a stool in a vast lecture theatre, capturing the attention of a hundred and sixty ex-servicemen with her infectious enthusiasm, a characteristic she retained to the end'.<sup>9</sup> A lot, of course, depended on the individual in the audience as well as the individual lecturer.

At some point, the emphasis on communication kicked in, and we have already noted that figures like Dick Chorley and Peter Haggett were inspirational as well as divisive. By the 1970s, at the very latest, the Department was enlivened by 'some brilliant lecturers', in the words of alumnus Nigel Gates, adding that 'one could not fault the dedication and professionalism of all the academic staff'.<sup>10</sup> It is invidious to single out exemplars, but perhaps I can mention Derek Gregory, who left for Canada not long after Stoddart was poached by Berkeley. Gregory was (to me) a natural performer. He inspired from the podium, typically speaking above the audience's heads (literally so, as his delivery seemed to be pitched to the clock below the projector booth in the main lecture theatre). Whatever one felt about the material at hand (assuming you understood it), Gregory invested even the most arcane philosophical



Gordon Manley



David Stoddart (Sarah Hamylton)

and methodological topics with what seemed like the most vital significance – and this was before his interest in geopolitics turned to genuine life and death questions. Gregory left you in no doubt who was right, and who wasn't, who was in and who wasn't, where you should stand and what you should think. Such style and substance was not to everyone's taste, but the vigour and air of authority was commandingly impressive. Other colleagues were clearly standouts, capable of entertaining a lecture hall even if students were not devoted to their material. David Stoddart was remembered for using a tree branch picked up from outside the Department to illustrate Horton's law of stream numbers. Mark Billinge managed to illustrate the complexities of phenomenology by lobbing Smarties to a startled student audience. And there were many others, of course. Alumni will no doubt be able to supply their own favourites.

It is likely that supervisions are remembered more than the lectures, however. Supervisions are the most effective means of not only delivering information but making sure that students understand it. As with lectures much depends on the particular supervisor, but it is clear that this was a unique opportunity, much valued by colleagues like Alan Baker, who had come from UCL with no previous experience of the Cambridge system. He remembers that

**Some of the most enjoyable teaching that I did was in this room here [Room E1, Emmanuel College]. Two or three students, if they had done their homework, as it were (sometimes they hadn't done their homework, and then it's a waste of your time and theirs) but by and large they are bright students, they had done their homework, and that therefore you could have a genuine exchange of ideas and knowledge.<sup>11</sup>**

4 Interview with Alan Baker, 19 June 2018.

5 Interview with Lucy Adrian by Philip Howell, 21 June 2018.

6 Interview with Tim Bayliss-Smith, 20 June 2018.

7 Hilda Richardson, in Manley et al, 'Frank Debenham', 459.

8 Recollections of David R. Wright, Department of Geography archives. Mitchell and Smith 'earned my respect', says David Wright, 'and I appreciated the many insights they gave me: they have enriched my life ever since'.

9 J.T. Coppock, 'Obituary: Jean Brown Mitchell 1904-1990', *Scottish Geographical Magazine* 106 (1990) 64. She was also fondly remembered by David H. Williams (T 1953-56), who considered her an inspiring lecturer, someone who converted him from physical to historical geography, leading to a dissertation on the medieval monastic economy in Monmouthshire, and a lifetime of writing in Cistercian history, alongside his career in the Church: Recollections of David H. Williams, Department of Geography archives.

10 Recollection of Nigel Gates, Department of Geography archives.

11 Interview with Alan Baker, 19 June 2018.

1983 ~ 84

1st. Year



Year photo of 1983-4 featuring both David Stoddart and Derek Gregory

Supervisions were very different from seminars, which had to be carefully orchestrated to get the most out of the format. In supervisions there was at least the opportunity to range very widely, often off-topic, but all the better for that. Former students will remember the idiosyncracies as much as anything else: Tim Bayliss-Smith, for instance, recalls Dick Chorley explaining things with a diagram drawn in condensation on the glass of a window on a cold Cambridge day, dissolving, tantalisingly ahead of Tim's ability to understand it, or hearing Benny Farmer opening up a window mid-supervision to bark 'Get off the grass!' at interlopers on the grass outside his office in St John's.<sup>12</sup> But besides the eccentricities, students will also appreciate being put on the spot, forced not just to think but to articulate ideas and arguments. It is here that relatively ineffective lecturers such as Gus Caesar probably came into their own:

**The secret lay not in his Cambridge lectures on economic geography, on British regional planning, or on the Soviet reorganisation of Eastern Europe, although these were models of clarity and precision. The key lay in his tutorials (or to use the Cambridge term, supervisions). No one who experienced the hour-long inquisitions in his rooms on Main Court at St Catharine's, delivered through a haze of Three Nuns pipe smoke, will forget the process. Essays were disassembled, the reasonable parts retained, new components added, and the whole reassembled into something that was well ordered, logical and, above all, geographically sound. He had an innate sense of what gave coherence to a geographical point of view and drove that relentlessly into those he taught.**<sup>13</sup>



*Beyond the supervision room: Gus Caesar helps female students down from a cliff in Tenby, 1938*

David Keeble also rates Caesar as a superb supervisor, who instilled in his charges at St Catharine's 'a very focussed, logical approach to how to marshal evidence, formulate questions, and problems, bringing the evidence to bear in a logical and sequential way, coming finally to a rational and logical conclusion.'<sup>14</sup> Alumni of a certain generation will remember this practice of reading one's essay out to the supervisor and one's fellow supervisees, something that had not quite died

out in my own student days in the 1980s, but which has now disappeared completely. There are advantages: Dick Grove recalls being supervised by Alfred Steers, who he rated as a good supervisor, noting that 'One learned from the experiences, and the productions of one's contemporaries', but also that, in general, he picked up as much from his fellow supervisees as from the supervisor.<sup>15</sup> Steers was, in marked contrast to his inaudible lecturing, 'a diligent and highly effective supervisor.'<sup>16</sup>

It is probably fair to say that there is a considerable dose of idealism in such descriptions. Reading out one's essay to a supervisor was an alternative to marking them, and students today now expect to have some

<sup>12</sup> Interview with Tim Bayliss-Smith, 20 June 2018.

<sup>13</sup> Peter Haggatt, obituary of Gus Caesar, *Independent* 14 September 1995.

<sup>14</sup> Interview with David Keeble, 11 June 2018.

<sup>15</sup> Interview with Dick Grove by Philip Howell, 8 June 2018.

<sup>16</sup> Meadows and Spencer, 'James Alfred Steers', 40.



written feedback on the essays over which they have slaved for days. Over the years, the Department has jealously protected the freedom of supervisions and the privileges of supervisors to 'teach around' the topic, as the familiar phrase has it. But it does feel now like a losing battle, and the pragmatists, by contrast, recognise that students will want at least to have learned something specifically useful when it comes to the examination: 'will this be in the exam?' is the familiar response, even if it remains implicit. A lamentable habit, not only unchecked but probably uncheckable, is to supervise to students who sit with open laptops, not so much hanging on your every word, as continually assessing whether your words are worth writing – or rather typing – down.

All the same, supervisions are at the heart of the experience of Cambridge Geography, and alumni will hopefully recall many supervisions with great fondness, precisely for this unique opportunity to consider topics in depth and to discuss them with one's peers. In conclusion, we should note that the Department consistently charts in league tables as heavily committed to teaching, with the teaching programme staffed by professors and lecturers rather than relying on junior faculty. Most staff are also heavily involved in their colleges, most importantly as Directors of Studies. All this takes precious time and energy away from research, and all the other commitments by which we are judged, but most of us accept that teaching undergraduates is a vital part of what we signed up for, and most of us enjoy that responsibility rather than treating it as a chore. Supervisions are a great opportunity for us to try out ideas, to share our research, even as we are making sense of it ourselves. It is a culture still well worth defending.

I must also stress the role of college lecturers and staff, who have always made a great contribution to Tripos teaching, but who are apt to be neglected. Jean Grove, for instance, the glaciologist and pioneering expert on climate change, directed studies at Girton for over forty years, and was an exceptionally supportive mentor for generations of geographers, despite never being a University teaching officer. As Jean Clark, she graduated from Newnham in 1948, having participated in the 1947 Long Vacation expedition to the Jotunheim range in Norway, field experience that led to a lifelong interest in glaciological research.<sup>17</sup> Though she had been an assistant lecturer from 1951 to 1953 at Bedford College in London (at that time the first women's college in the



*The 1948 Jontunheim expedition group (photos by John Stansbury)*

U.K.), Jean returned to Cambridge after her marriage to Dick Grove. In 1953 she was appointed a college lecturer and director of studies in Geography at Girton, and she became a full fellow there in 1960. She stepped down in 1994, and died in January 2001. Girton alumni will remember her warmth and support – and here perhaps we only need to cite the words of Midi Berry as a measure of her contribution over these forty years:

**She was also quite simply one of the kindest, most human teachers I have encountered. Her round face glowed, her smile was dazzling and her laugh so infectious and frequent that just spending time in her presence was a tonic. ... A mother of six and intensely practical as well as academically brilliant, Jean could spot student blues at a thousand paces. She also seemed to have that remarkable sixth sense which enabled her to gauge if tea and sympathy were the best medicine in the moment, or whether she should administer a humorous-but-no-nonsense recommendation to pull one's finger out.**<sup>18</sup>



*A recent supervision*

<sup>17</sup> Jean worked on glaciers for her PhD, awarded in 1956, before her attention turned to climate variability during the Holocene, work which resulted in her 1988 book *The Little Ice Age*. See Christina L. Hulbe, Weili Wang, Simon Ommaney, 'Women in glaciology: a historical perspective', *Journal of Glaciology* 56, 200 (2010): 944-964, 951. See also H.D. Allen, <http://www.quaternary.group.cam.ac.uk/history/others/Grove.html>

<sup>18</sup> See <http://www.nightsoftheroad.com/category/jean-grove/>.



*Potholing at Tenby, 1938*



*Excellent health and safety, Tenby, 1938*

There are other figures equally important, including Roland Randall at Girton, but I have space only to add the career of Lucy Adrian at Newnham. Lucy is the first to play down her own considerable academic ability, and to note the ways in which devotion to teaching took time away from her own research in historical geography, but she too inspired scores of undergraduates. Lucy was also instrumental in bringing to Newnham geographers of the calibre of Susan Owens and Linda McDowell, Liz Watson and Emma Mawdsley, women who have shaped and led the Department in recent years. Most importantly, Lucy had a particular empathy with undergraduates struggling to place themselves in Cambridge. Dame Fiona Reynolds, who with Susan Smith is one of two current College principals who are Geographers, has written fulsomely about Lucy's influence on her own career, and her remarks can serve as tribute to all the college teaching officers who have made such a world of difference for undergraduate Geographers:

**Above all I relish what she taught me. Don't give in, don't give up, and face challenges with curiosity as well as determination – you never know where things might lead. I would never have believed my career would shape up as it has, and least of all that I would end up back in Cambridge as a Head of House. But if I ever think about how it happened, I thank Lucy for encouraging me to believe I could do it, and for believing in me.<sup>19</sup>**

Finally, there are the field trips. It is almost certain that recent Geography alumni probably remember their experiences in the field more vividly than anything else. Field trips and field work have a very long tradition in Cambridge. They have been part of the DNA of the Geography Department almost from the beginning. Summer school courses were mounted by Cambridge lecturers such as Henry Yule Oldham and Philip Lake in the early twentieth century, including an excursion to Denver sluice in Norfolk. We can also note Frank Debenham's personal enthusiasm for field teaching, instanced by his late lectures on 'Geography in the Field'

for the Qualifying Examination, and participation in the Cambridge Geography Club's Easter 'camps' to Austwick in North Yorkshire and Patterdale in Cumbria in the early 1930s. More directly, we can think of Alfred Steers' excursions to the Norfolk coast in the 1940s and 1950s, and trips to Derbyshire to study river grading during the war. For Steers, 'Wide reading, field excursions, personal field work are all vital in the training of a physiographer.'<sup>20</sup>

Such working vacations had a formative effect on the undergraduates enrolled as research assistants. Angela Cameron recalled memories of her fieldwork expeditions to Scotland with Bruce Sparks, and Norway with Vaughan Lewis, in the mid-1950s. The latter was only one of several expeditions to Jotunheim, started by Vaughan Lewis in 1947: a series of investigations into glacier behaviour that trained up a generation of glaciologists. Trevor Johnson remembers the 1955 expedition, researching glacial ice flow by inserting polythene tube into a tunnel in the iceflow; global warming was not yet identified, but melting ice and retreating glaciers were a great interest to Geography students.<sup>21</sup>



*1966 Arolla Fieldtrip (Jane Hardy)*

<sup>19</sup> Fiona Reynolds, 'A letter to my Director of Studies', Newnham College newsletter, *Changing Lives* 19, Winter 2017, available at [http://www.newn.cam.ac.uk/wp-content/uploads/2017/02/ChangingLives\\_19\\_web.pdf](http://www.newn.cam.ac.uk/wp-content/uploads/2017/02/ChangingLives_19_web.pdf).

<sup>20</sup> J.A. Steers, 'Physiography: some reflections and trends: address to the Geographical Association', *Geography* 45 (1960): 1–15, 13. 1960s, 13, cited in Meadows and Spencer, 'James Alfred Steers', 45.

<sup>21</sup> Recollections of Trevor Johnson, Department of Geography archives.





*Having a rest at Ingleborough, 1953 (Rosemary Seaton)*



*Newnham Geographers in Lapland, 1953, Rosemary Seaton*

It is easy to imagine that for a glaciologist such as Gordon Manley getting away from the flatlands a few years earlier with Debenham was an unmissable opportunity:

**All who were privileged to take part in these excursions will never forget their initiation into the interpretation of mountain land-forms, Cambridgeshire being depressingly uninteresting in this respect. Debenham's exposition of the limestone country around Ingleborough and of the glacial features of Grisedale were an unforgettable part of the education of all who were fortunate enough to follow him from lecture theatre to mountains and valleys.<sup>22</sup>**

The same can be said of Steers' trips out from landlocked Cambridge. Enid Ryall assisted Steers in the East Coast part of his great coastline survey in the 1944 Easter vacation, with several other female undergraduates, and she has left a record of her wartime experiences: 'Knowing that coastline fairly well I was staggered by the damage done to the concrete fortifications erected at the beginning of the war and the coastline by the sea in the period 1939-1944'; something of the resulting camaraderie is also observable in Enid's photograph of a Fenland survey group only a couple of years previously.<sup>23</sup> We can also note that there were a number of informal college-based trips: the Newnham Geography Freshers took part for instance in trips around the wool churches of East Anglia with Jean Mitchell in her open-top Morris Minor.

But these experiences, however valuable, were never part of the Geography Tripos, nor were they provided or required for all students. Undergraduates did have to participate in field classes close at hand – that is, in the actual fields of Coe Fen or the Gog Magog Hills, in order to learn skills such as surveying and map making. And there were occasional coach trips to which undergraduates might sign up – to the Brecklands and other readily available field sites in Cambridgeshire and the neighbouring counties. These optional day or half-day trips lasted well into the 1990s, with Robin Glasscock leading trips to the wool churches of Suffolk

as well as the historical geography of Cambridge, and David Keeble introducing undergraduates to the economic geography of Cambridge. The walking tour still occasionally features in our teaching programme, and we still take in happily accessible locations such as Wicken Fen in Cambridgeshire, Holme Fen near Peterborough, East Mersea near Colchester, and various Quaternary sites in Norfolk. The Norfolk coasts have remained a significant field site for undergraduate teaching – revived in the 1970s and 1980s by David Stoddart. There will be many alumni who remember these trips, as much for Stoddart's somewhat cavalier approach to health and safety:

**Amongst other things we looked at were mudflows and I was sent across one to check the route's safety. David Stoddart said that it looked fine. Unfortunately it was not fine and I soon became stuck in the mudflow (up to my waist) halfway up a cliff and was continuing to sink. After all the laughter had subsided my predicament was realised and I was – with some difficulty – pulled out of the mudflow. I was then sent into the icy North Sea (I think that was in February 1972) to wash the mud off before I was allowed back onto the coach. As I said, there was no health and safety restrictions in those days.<sup>24</sup>**



*A wartime fieldwork trip on the fens (note the larger number of female students) Photo from Enid Ryall*

22 Manley, Roberts, Hewitt, Richardson, and Richardson, 'Frank Debenham, 1883-1965', 458.

23 Recollections of Enid Ryall, Department of Geography archives.

24 Reminiscences of Nigel Gates, Department of Geography archives.





*Top: Nigel Gates stuck in the mud. Bottom: fieldgroup wading to the shore (Nigel Gates)*

*Top: Girton students on Arolla, 1973 (Rosemary Pernow)  
Bottom: Students on fieldwork in the mid 1980s (Sue Owens)*

All of this gives every indication of continuity, consistency of purpose, and a genuine commitment to the benefits of field teaching. But for many years anything further afield was simply prohibitively expensive, and possible only in the form of 'expeditions' organised by individual lecturers, or by undergraduates themselves, sometimes with regard to their dissertations. The real change comes at the end of the 1970s, with the formalisation of residential field classes into the Department's teaching programme. Field trips only then seem to have become part of the Department annual planning process.

For this we have to thank Tim Bayliss-Smith. Professor Darby charged him in 1974 with organising a Department field trip to a UK destination: this became the IA field trip to the Peak District, Lake District, or South West England. This domestic first-year trip was complemented by weeks in Crete, the Algarve, and the Netherlands, the Department having recognised the new world opened up by charter flights. By the 1980s the University's so-called 'Pink List' (the Vacation Study Grant) supported 7 days Geography fieldwork at Easter IA, 7 days at Easter IB, and 3 days in April or September at Part II, in addition to dissertation work. This relatively generous financial climate allowed opportunities for both general IA and IB trips, and specialist classes between Part IB and Part II. The latter included historical geography courses in France led by Alan Baker, and the glaciology trips to Norway and then Switzerland pioneered by Martin Sharp and Keith Richards. Wales, Exmoor, Mull, Central and Eastern Europe were also visited. But participation in these field trips was entirely voluntary, an opportunity put on by members of the Department

to supplement the Geography Tripos. None were formally assessed. Moreover, attendance at residential field classes was described in 1983 as disappointing: the Lake District Easter IA Field Class was undersubscribed, and the lesson learned by the Department was apparently 'the low priority accorded to field and practical work by many undergraduates'.<sup>25</sup>

There was evident confusion not only as to where field trips should go, but also what they were for. David Stoddart questioned the value of 'general' field trips, given the level of field work in A-level syllabus, and which the Department could not match; he also asked explicitly for the purpose of field work to be considered by his colleagues.<sup>26</sup> It was agreed that the position and assessment of field work should be 'regularized', though the desire that field classes should not be independent of particular courses seems



*Students in the Algarve, 1989 (Keith Richards)*

<sup>25</sup> UOM, 11 March 1983. Noted in 11 March 1983 that other or proposed classes included Scolt Head, and field work connected with Part II Resource Management and Conservation, and historical geography plans too.

<sup>26</sup> UOM, 15 April 1983.



particularly optimistic in hindsight.<sup>27</sup> Alan Baker called for a long- and medium-term policy on Departmental field courses.<sup>28</sup> Staff agreed to continue general field courses at IA and IB but to tie the Part II field courses to particular papers (Norway to Glacial Studies, the Netherlands to Coastal Geomorphology, for instance). Department finances also struggled with the costs of these multiple field trips. A proposed 15-day Norway trip was withdrawn because of the costs involved. Asking for greater contributions from participants was also only reluctantly endorsed; it was felt that these might act as a disincentive, and might even make attendance very difficult if not impossible.<sup>29</sup> Such a system of voluntary trips was also increasingly difficult to justify, particularly where pressure was on to calibrate the benefits of University subsidy. This was even more acute when funds were transferred from the Vacation Studies Grant to the University's separate Schools in 2003-4, accompanied by even greater need to defend, both academically and financially, the compulsory residential field classes.<sup>30</sup>

What looks like an inevitable move to compulsory field classes, with field work assessed as part of the Geography Tripos, came only in the mid 1990s, when we said goodbye to the IA field trip, and hello (or should it be *hola?*) to a roster of overseas field trips at IB. Mallorca, the Algarve, and Crete were the workhorse destinations, though the Netherlands, South East Spain, the Aeolian Islands, Cyprus, and Malta were also established as field trip locations in the 1990s and early 2000s. The specialist Part IB/Part II field trips still operated as opt-in opportunities, with more of

the intensive participation expected of earlier iterations of Department field work. The Part II glaciology field trip began in 1985 as a research trip with undergraduates as field assistants, first in southern Norway, working on the Midtdalsbreen glacier, and subsequently on the Haut Glacier d'Arolla in Switzerland; this field trip was reinvented in 2006 as a conventional physical geography field trip with more swish accommodation (hotels replacing tents) but also geared to teaching rather than to research. Alan Baker's historical geography field class to the Loire also ran several times throughout the 1990s, and this historical orientation was carried over into a trip to Dublin organized by Gerry Kearns and myself in the 2000s. But in 2009 the specialist part II trips were shelved, for reasons of economy alone – they were always vulnerable, given that they were the only trips that were not now compulsory nor assessed, for all the valuable work accomplished.

And so we are left with the IB residential field trips, mostly 'general' in nature but with room for some smaller, specialist destinations (the Dublin field trip was simply repurposed, for instance, for a larger, second-year cohort, with the help of David Beckingham). This is the modern era – a *rite of passage* in which 20-30 Geographers travel *en masse* to an overseas, if not particularly distant destination, in the Easter vacation between their second and third years.<sup>31</sup> In Tim Bayliss-Smith's considered observation, the present system represents 'an extraordinary revolution in scale, destination and educational purpose'.<sup>32</sup> They have become essential to the Geography tripos; they still remain fun, and, we hope, both enjoyable and instructive.



Recent Part IB fieldtrips to (clockwise from top left) the Atlas Mountains, Skallingen, Tenerife and Berlin

27 UOM, 3 June 1983.

28 UOM, 3 February 1984.

29 UOM, 6 December 1984.

30 UOM, 11 June 2004.

31 The stress was placed on field trips overseas (UOM, 15 June 2012).

32 Tim Bayliss-Smith, 'Department field trips', *Landmark* 3, Winter/Spring 2009, 1; <https://www.geog.cam.ac.uk/alumni/landmark/3/landmark3.pdf>.

## Examinations and Assessment

**The Geography Tripos leads inexorably to the end of year examinations. The nature of those exams has changed radically over the years, along with other forms of assessment.**

The Geography Tripos naturally concludes with the dreaded end-of-year examinations. Over the years, these have been supplemented by other forms of assessment, including the submission of various project marks, in addition to those for the undergraduate dissertation. But longstanding University preference ensures that the greatest proportion of assessed marks comes from the traditional 'unseen' examinations, and it is the exams that occupy students' minds the most. Many of us speak rightly of learning for learning's sake, and many of us insist that supervisions offer students the unparalleled opportunity to range far and wide in their ideas. But the ultimate goal of passing the exam will remain uppermost in student minds. (This may be truer than ever, but we should not think that this is only a product of university fees and student debt.)

The very first Tripos exam, in 1920, set Part I candidates two papers in *Physical Geography*, two papers in *Political and Economic Geography*, and a paper each on *Cartography*, *the History of Geography*, *Anthropogeography*, and *Regional Geography*. There was also a practical examination with two questions, one involving calculating average rainfall from a rainfall map of Nottinghamshire, and a second exercise in drawing a sketch-map from the field book supplied. Pleasingly, given Geography's enduring reputation amongst other undergraduates, the 1920 rubric advises that these maps 'may be finished in pencil, ink, or coloured crayons'. This was a great test of stamina and concentration: the eight exams, each of them three-hours long, were sat over four consecutive days, Tuesday June 1<sup>st</sup> to Friday June 4<sup>th</sup>, 1920, with the practical held immediately afterwards, on Saturday morning from 10am to 12 noon. Apart from *Anthropogeography*, where several questions now would cause us concern, the papers follow a familiar enough format, many questions combining place description with an emphasis on climatic and environmental determinism of greater or lesser degree:

**Divide the region between the Equator and the Tropic of Cancer into climatic processes and describe the seasonal changes of temperature in each province. (Part I, *Physical Geography* (1), 1 June, 1920)**

**Discuss the influence of the climatic conditions of Africa on its economic resources. (Part I, *Political and Economic Geography* (2), 2 June, 1920)**

**Compare the character and productions of the plains of Andalusia, Lombardy and Romania. (Part I, *Regional Geography*, 4 June, 1920)**

These papers were also directed at the evolution of political systems in different parts of the world, however, and the other question papers covered in fairly straightforward fashion the history of geographical exploration and the principles of cartographic representation.

The Part II examinations held for the first time in May, 1921 set students six papers, each of which allowed students a choice of topics from three groups: (1) *Geodetic and Trigonometrical Surveying*, (2) *Geomorphology*, and (3) *Economic and Commercial Geography*. These papers were naturally more detailed and challenging:

**Discuss the problem of obtaining astronomical positions in polar latitudes, and illustrate from the methods of any one expedition. Show that when close to the pole any observed altitude of the sun at an approximate Greenwich time gives a position line which may be plotted directly without any trigonometrical calculation. (Part II, Paper 1, (1) *Geodetic and Trigonometrical Surveying*, 31 May, 1921)**

**Give an account of the present state of our knowledge with regard to fissure-eruptions. Trace the distribution of Cretaceous and post-Cretaceous fissure-eruptions over the globe; and describe the topographical features of one area occupied by the product of such eruptions. (Part II, Paper II, (2) *Geomorphology*, 31 May, 1921)**

**"The circumstances of India have made it necessary for us to devise proposals which will bring the State into far more intimate relations with industrial enterprise than the policy of Government or public opinion has hitherto permitted" (Report of the Indian Industrial Commission, 1916-18). In what directions and to what extent do you consider that Indian industries might be developed by State action? (Part II, Paper III, (3) *Economic and Commercial Geography*, 1 June, 1921)**

Later developments do not deviate very significantly from these substantive concerns, though in format the human geography papers at Part I were reduced to *Economic Geography* and *Historical Geography*, and the number of papers down to seven. Very significant, however, was the introduction of the Geographical Essay, a classic (if in retrospect eccentric) format that lasted for decades. The essay requirement was in place by 1931 at the latest, when it was used both at Part I and Part II of the Geography Tripos. Here is the Part I paper:



## PART I

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**TUESDAY** *June 2, 1931.* 1.30-4.30.

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ESSAY.

Write an essay on **one** of the following subjects:

1. England's Industrial Crisis.
2. Cities.
3. East Anglia.
4. The Depths of the Ocean.
5. Our Mobile Earth.
6. "Travel, in the younger sort is a part of education; in the elder, a part of experience." BACON: *Of Travel*.

This example is relatively straightforward in approach, though the use of the essayist and philosopher Francis Bacon as a means of stimulating an extended essay is a representative sign of ambition and idiosyncrasy.

In subsequent iterations the blunt brevity of such questions approaches an odd kind of poetry:

## GEOGRAPHICAL TRIPOS. PART I

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**TUESDAY** *29 May 1961,* 1.30-4.30.

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ESSAY

Write an Essay on **one** of the following:

1. Influence.
2. Peasants.
3. 'Facts, facts, facts, the fatal futility of facts.' (HENRY JAMES.)
4. 'Too much calculation is the sign of too little thought' (O. VON GRUBER.)
5. 'Only the weak are good. They are good because they are not strong enough to be bad.'

The apotheosis of the Geographical Essay is reached in the late 1960s, however, with questions on such modish if not straightforwardly geographical topics as 'Sexual equality means the death of chivalry' (31 May 1966) and 'Fashions for men' (25 May 1967). The two following examples, both from 1968, achieve a greatness never subsequently to be accomplished or approached:

### **GEOGRAPHICAL TRIPOS. PART I**

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**WEDNESDAY** 22 MAY 1968. 9 to 12

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ESSAY

Write an essay on **one** of the following:

1. Oil and water.
2. Growth points.
3. Jam tomorrow.
4. L.S.D.
5. Concord.

### **GEOGRAPHICAL TRIPOS. PART II**

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**WEDNESDAY** 22 MAY 1968. 9 to 12

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ESSAY

Write an essay on **one** of the following:

1. All systems go.
2. Random walks.
3. Unsteady states.
4. Degrees of freedom.
5. Celts, Kilts and Cults.



These questions surely stretch the format as far as it could go. In retrospect, it is hard to see how such topics could ever have been taught, answered, or satisfactorily assessed. But they have something of the spirit of 1968 all the same.

It should be noted that by this time these extremely discursive elements coexisted uneasily with the demands of the New Geography. All the same, from the 1950s to the early 1970s one could still find many questions that could have been taken from exams in any of the previous decades:

**Write an essay on till. (Part II, *Advanced Physiography*, Paper 1, 31 May, 1951)**

**Outline the causes of the Chinook, Mistral, Sirocco and Harmattan. What are their characteristics? (Part I, *Physical Geography*, 4 June, 1954)**

**'The poverty and fickleness of the rainfall are at the basis of problems of land use in most of Africa.' Would you agree? (Part II, *The Geography of a Prescribed Area Outside Europe*, Section B: Africa, 3 June, 1971)**

And even within these constraints there is room for inspiration:

**A Time Machine transports you back to either the East Anglia of Henry VII or the English Midlands of the Restoration. You are provided with a docile mare for transport. Write field notes on your week's geographical observations. (Part II, *Historical Geography*, 26 May 1961)**

**'To generalize is to be an idiot, to particularise is the alone distinction of merit' (W. Blake).**

**'Nature doesn't come as clean as you can think it' (A. N. Whitehead). How far has the recent history of geography been dominated by clean-minded idiots? (Part II, *Geographical Thought and Ideas*, 27 May, 1971)**

The late 1960s brought a systematic emphasis that does look distinctive, an emphasis that was not confined to physical or economic geography but had begun to influence Geography as a whole – as the last exam question indicates. In the 1971 Tripos questions the influence of the language of models and theory can be gauged from many examples:

**How appropriate is Lachene's model of the relationship between transport networks and the location of economic activity in analysing the geographical effects of canals and railways in eighteenth- and nineteenth-century Britain? (Part II, *Historical Geography I*, 29 May, 1971)**

**With reference to California and New England, examine the evidence for 'polarisation' and**

**'trickle-down' effects at the regional level. (Part II, *Economic Geography*, 28 May, 1971)**  
**'Assumptions of stationarity rarely apply in the real world.' Discuss with reference to the value of Markov chain models in geography. (Part II, *Economic Geography IV*, 29 May, 1971)**

Even so, there was much that was entirely consistent with the traditional formats. Even in the new millennium it is perfectly possible to single out a few questions that might well have been asked of earlier generations, without much or any rewriting.

There are, naturally, contemporary preoccupations to trace. In 1999–2000, for instance, attention had shifted from Britain to the historical geography of Europe, to the causes and consequences of globalisation, to environmental degradation and what can be done about it, to new (or apparently new) geopolitical tensions, and, even in the first year, with constructing and interpreting the record of climatic and environmental change. There are also concerns with gender, class, sexuality, and race (in the modern, critical understanding), with the concepts and works of the theorists and philosophers *du jour*. Since at least the 1960s, Tripos papers have come to focus on such specifics, including passing fads and fashions, rather than the by contrast much more general and straightforward questions of the first half of the Tripos's life. That is an inevitable part of the evolution of the subject over the decades, however, and it should not be regarded as merely modish. I share the view of Tim Bayliss-Smith in this regard:

**It continues, and so it should. The subject would be dead if it hadn't constantly innovated. It's not surprising to me that I don't recognise the Geography even from three years since I retired. The courses are all different.**

I would only add that some things will not have changed much. In 1968, the Chair of Examiners noted that 'The main shortcomings in scripts noted by examiners were irrelevance, thoughtless reproduction of lecture material, poor handwriting, and a paucity of sketchmaps and diagrams.'<sup>1</sup> It is a safe bet to say that each year's examiners would concur.

Finally, a word on performance. For many years the Department graduated between 5 and 15% of students with the top honours, and reserved the starred First for one or two students a year. In some ways this did not matter too much: it certainly did not stand in the way of excellent students going on to fine academic careers unhampered by the drag of an upper second. Anthony Young remembers that 'whilst there was a yawning gap between the likes of Peter Haggett and Ken Warren and the rest us', nine of his year became academics, seven of them professors.<sup>2</sup> From time to time there were instances of dissent. In 1978, David Keeble expressed continued disquiet over the low numbers of first-class awards.<sup>3</sup> But the Department was keen to preserve the distinction of the First, an achievement to be undiluted by greater generosity. One of my earliest memories as

1 UOM, 2 July 1968.

2 Recollections of Anthony Young, Department of Geography archives.

3 UOM, 14 October 1978.

a new member of staff in the early 1990s was Robin Donkin expressing the view that a Cambridge First should mean something. It was not to be given away lightly, I understood, like a toy in a packet of cornflakes.

In 1988, David Stoddart noted that of the 3600 students who had been classed in Part II by that year, 300 took Firsts, with only one in ten those Firsts being starred. This was not especially out of line with Cambridge standards: in 1987, when 9.9% of Part II candidates gained Firsts, the corresponding figures for some roughly comparable triposes were 9.5% in Economics, 15.5% in English, 10.5% in History, 10.8% in MML, 11.5% in Law, 18.9% in Natural Sciences, 10.0% in Social and Political Sciences. But with the average across the University in all Honours Examinations being 14.9% for Firsts, Geography was still among the more parsimonious subjects. In 2005, there was strong concern about the lack of comparability of Geography with the other Cambridge triposes, subjects that had travelled much further down the road of relaxing the strictures on higher awards. To this we may add that in recent years external examiners have become willing to question whether a Department like Cambridge should, with its calibre of students, expect to produce a 'normal' distribution; anything less than a top-heavy distribution would indeed be a cause for concern. The result has been dramatic. At Part II, the numbers of Firsts had moved past the numbers of Thirds in the mid-1960s, but they moved past the aggregate of 2:2s in the mid-2000s. 2:1s had preponderated over 2:2s by the 1970s, but they became the default degree classification in the 2000s at the very latest. In 1969, 2:2s and Thirds predominated, even at Part II, but this proportion was down to the 20% or so in the 1990s, and fewer than 1 in 10 by the late 2000s.

Such figures are not out of step with other Cambridge Triposes, nor with Geography degrees elsewhere. Our external examiners have tended not only to agree with the need to award greater numbers of the higher degrees, but to try and advance this through changes in assessment criteria and classing systems. They have consistently praised the standards achieved by Cambridge Geography students, and have considered that a great many would be achieving First-class degrees elsewhere in the country. Perhaps nowhere else is this obvious than in the Part II dissertation. Cambridge Geographers have consistently been well represented in the national dissertation awards run by the RGS and its research groups. We must be doing something right, then, and even if a First is easier to come by now than it has ever been, there is nothing to suggest that Cambridge Geographers are any less strong than their predecessors, nor will be any less successful.

## Conclusions

For students the Geography Tripos means three-years of study, with three examinations, one at the end of each year. It is not a lot of teaching time, all told, since at least half of one of the terms is devoted to revision and the exams. And, of course, undergraduates are not expected, even in this workaholic era, to be spending all their time in the library or the lecture hall. University is a wonderful opportunity, for most of us a unique opportunity, to learn about who they are and who they want to be. Still, even if the time spent studying was relatively short, it was bound to make a lasting impression: as David Wright says, 'those few weeks made a lasting impact on us all: 60 weeks. It felt like MUCH more!<sup>4</sup> It was also time spent learning how to learn, so that even if most students forget quite quickly the details they had slaved to remember for the exams, or now recall only random snippets of information, they likely gained lifelong skills – how to research a topic, how to present their ideas and arguments, how to discuss and defend them. Another alumna sums up the experience for all of us when she writes

**When I left Cambridge in 1948 I had understood that I knew nothing but I was able to find out anything!<sup>5</sup>**

The Geography Tripos has changed a great deal over these hundred years, and teaching styles and techniques have changed too, but each generation of Cambridge Geographers will probably nod their heads in agreement, whether they learned about trigonometry or T-tests, commercial geography or postcolonialism. Over 6000 students have now taken the Geography Tripos in one of its many incarnations, and most of us – even some of those who defected to other subjects – will always *feel* like Geographers as a result, whatever we have done subsequently in life. We hope that students from every generation will feel, equally, part of this century of Geography teaching at Cambridge.

4 Recollections of David R. Wright, Department of Geography archives.

5 Department of Geography archives.



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# Border Crossings: geographies of class, gender, mobility and migration

Professor Linda McDowell, University of Oxford. Newnham 1968.  
Centenary Lecture delivered on 25 October 2018.

**A**s we celebrate the centenary of the Geographical Tripos, it is salutary to reflect on how different Cambridge – the university and the city – as well as the UK as a whole is compared to 100 years ago, or even the 50 years within the life time of us older alumni. I gave my lecture the title of ‘Border Crossings’ to capture the coincidence of four key changes in my lifetime which have altered my own, as well as others’,



social position, allowing us to escape some of the constraints of class, gender and place of birth. These changes have also been the subject of my academic research, captured most recently in two books about working lives in the UK since 1945.

The **first change** – women’s large scale entry into the labour market – is in my view perhaps the most significant transformation of the second half of the twentieth century. Almost as many women as men are now in waged work, including mothers of dependent children.

This increase is, in part, explained by the **second change**: the transformation of the economy into one dominated by service employment. Many of the jobs are in typically feminised occupations involving the care of others. As more women work for wages many of the services previously provided for love in the home are now part of the economy, including the care of children and older people. Making meals or clothes, love and counselling have all been commodified in some form or other. Indeed, it might be argued that the economy



as a whole is now feminised as many men work on what previously were typical 'female' terms as casual or temporary workers, changing jobs more frequently and often in precarious positions.

The **third change** is the greater diversity of both the population and the labour force, not only as women enter waged work but more students, older people staying in work longer and, most significantly, the rise in the number of people born abroad who now work in the UK. The non-British born population in the UK is now about 13% of the total and in origins is growing in diversity. The immediate post war population of people displaced by the Second World War was followed by post-colonial migrants from the Caribbean, the Indian sub-continent and East Africa, and more recently by migration from numerous other nations, including the European Union as it expanded membership. And migration is of course a hugely contested issue at present, not least in its connection to the Brexit debate.

The **fourth change** is both material and theoretical and its impact has been to fundamentally alter the nature of our discipline. The social sciences, including geography are now significantly more diverse, in approaches, theories and methods, affected by identity politics, feminist and postcolonial theory, by the inclusion of multiple voices – of the poor and dispossessed, women of colour, the working class, what are sometimes termed 'voices from below'. Classic binaries – the public and the private, masculinity and femininity – have been disrupted and rethought and rational economic man, without a class position or other location, who used to dominate economic geography has in the classic words of feminist scholar Christine di Stefano 'been brought down to earth and given a pair of pants'. Situated knowledge that reflects social attributes has largely replaced the view from nowhere, at least in human geography.

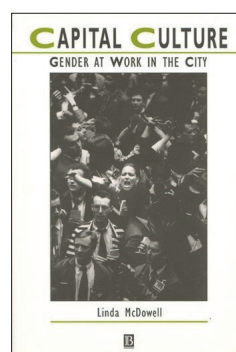
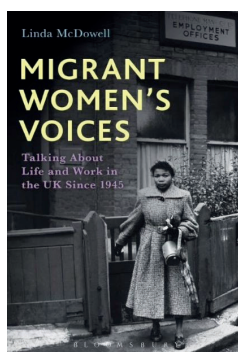
What has interested me over the last 25 years or so is how the coincidence of these four large-scale changes with periods of economic transformation or crisis has altered the composition of the labour market. Through numerous interviews with the key participants I have explored several of the significant moments of economic change in the second half of the twentieth century. The first, chronologically, is the immediate post-war period of reconstruction, as white women left the labour market and women from Ireland, the Baltic States, the Caribbean came to the UK in the 1940s and 1950s and later from India, Pakistan and East Africa came to the UK. Their entry altered the relationships between class, gender and ethnicity in the labour market, but also reinforced inequalities that remain evident today. Through the attitudes of employers, co-workers and the public, who saw them as different from and inferior to 'local' women, women migrants were constructed as the 'Other'. As geographers and other scholars argue, the 'production of difference' based on bodily attributes including ethnicity and gender, is a key mechanism of discrimination in the labour market, one that has constructed migrant women as less eligible for many jobs across the last seven decades, but which also produces a hierarchy of eligibility among migrants themselves, in which migrants from different countries are ranked as more or less desirable than others for particular jobs.

In *Migrant Women's Voices* (2016) I extended the post-war story across the decades exploring the impact of growing diversity and of continuity and change in both migrant journeys and in labour market participation through the eyes of migrant women, who have always worked. These women have contributed to the British economy since 1945, often in 'caring' roles such as nursing or in serving the public in different jobs such as in the retail sector, in hospitality, through domestic service, as well as, although in declining numbers, in manufacturing employment, including the car industry in, for example, Ford in the 1970s in Dagenham and for BMW in the mini plant in Oxford in the 2000s. I interviewed just over 100 women who came to the UK between 1946 and 2012 and their narratives reveal with similar stories of discrimination over the entire period.

A second project involved an assessment of the upheavals in the City of London after deregulation in the 1980s. Despite some shift in the class and gender composition of the City, I demonstrated the ways in which masculinity remained a significant axis of advantage in investment banking. This research culminated in a book *Capital Culture: Gender at work in the City* (1997).

At the bottom end of the labour market, however, as deindustrialisation and the growth of service employment increased, masculinity became less of an advantage, culminating in a discourse about the 'crisis of masculinity' in the 2000s as men felt their status challenged and, for many, their incomes reduced. In a book (*Redundant Masculinities?* (2003)) comparing Cambridge with Sheffield, I explored the different that the industrial heritage of each city made to men's sense of themselves and their hope for employment. Most recently, I have been expanding research on men, by exploring the precarious position of marginal white working class young men: the group who are now the least likely to go to university, despite the enormous expansion of places in recent decades.

Perhaps this expansion might be added to the four significant changes that I outlined initially. The student body at Cambridge is radically different from when I matriculated in 1968. There are far more women and more people of colour than in the late 1960s and what is taught has also changed. There is always room for further change, of course, but geography and geographers seem more exciting now than then. I wish I could have my time again, but perhaps as an academic geographer I already have.



# Towards a more critical Physical Geography

Professor Stuart Lane, University of Lausanne. Fitzwilliam 1988.  
Centenary Lecture delivered on 8 March 2019.

I don't think that I will be the only graduate of the Cambridge Department of Geography to have been seduced by the excitement of the grand challenges (e.g. cities, war, migration) that human geographers address, and the associated philosophical upheavals that Cambridge Geography has brought about. Yet I became a physical geographer fascinated by pebbles and their transport by rivers. This came about as a result of a basic mistake, signing the wrong list on the Part 1a noticeboard in January 1989, such that I spent the following summer on an Alpine glacier rather than in a South American city. Since then, my work has become progressively tied to questions of how rapid environmental change propagates through Alpine landscapes, glaciers and ecosystems; and I now live and work in a country that is built upon the adaptation to and exploitation of its physical geography.

Of course, and more widely, it is not difficult to find global geographical crises that we can use to justify the existence of physical geography; biodiversity loss, species invasions, air pollution, soil erosion, floods, droughts, coastal erosion and so on; and physical geographers, including those in the Cambridge Geography Department today, are developing our fundamental understanding of many of these. Physical geography is by no means the only science making such contributions and I contend that what makes our contributions unique is that they are conducted within what David Livingstone calls the modern geographical experiment, "... *an experiment in keeping nature and culture under the one conceptual umbrella...*" (David Livingstone, 1992, 177). As part of such an experiment, there is hope that physical geographers may escape the naïve environmental scientism of the global change debate, one which assumes that evermore shocking images of global environmental crises are all that are needed for us to transition to a more sustainable lifestyle. Here I want to reflect upon three tenets that I think we need to pursue if Physical Geography is to realise the kinds of integrative project that elude most other disciplines.

Over the last few years, and working with Rebecca Lave at the University of Indiana, I have become involved in a project called "Critical Physical Geography". It has as its explicit aim the development of Geography as an integrative project, building upon three tenets. The first is the need for Geographers to (re)discover what Mike Urban in 2018 called "crappy" landscapes, that is landscapes where the environment meets people. Use of the word "crappy" is deliberately provocative, not intended to suggest that environments impacted by people don't have value, but more to draw attention



to the flight of physical geographers (myself included) to environments where all the complexities of human-environment interactions can be simplified out of our experimental design; and of human geographers to landscapes devoid of the material basis of nature. As physical geographers, the study of "pristine" landscapes (e.g. glaciers, coasts, tropical rain forests) allows human activities to be either ignored or reduced to simple drivers (e.g. climate change impacts on glacier recession or sea level rise; rates of forest loss). When less pristine environments are considered (e.g. soil erosion on agricultural land), the sophisticated study of environmental processes that the geographer can bring is commonly coupled to a highly unsophisticated treatment of humans, who are reduced to simple descriptors like population density. This is not only a critique of the failure of physical geographers to take people seriously. It is also a critique of the failure of human geographers to treat the environment as anything more than a space in which human activity occurs. Even political ecology, where geographers such as Piers Blaikie in the 1970s and 1980s showed how we could build sophisticated understanding of the politics and economics of environments and environmental degradation, has nowadays tended to reduce the environment to a template upon which human activities are played out.

The second challenge critiques the fundamental conception that the practice of natural science (and physical geography) can ever be apolitical; the basis of the traditional claim that through the exclusion of values and biases, natural science can claim some kind of higher authority in knowledge production. When scientists make such claims, they are themselves making a political statement because it gives their knowledge





*Arolla 2012- the ice is disappearing very quickly*

a primacy in decision-making. Here, there are clear parallels with the critique developed by Critical Human Geography in the 1970s. In a parody of being empirical, philosophers of science observed scientists, including environmental scientists, in their day-to-day practices and showed that scientists are not, and never can be, politically neutral. Scientists make decisions as to what they study and how they study it. Such decisions are not only influenced by the subject of their study (e.g. a river) but a range of other influences, including the academy (e.g. academic definitions of how a river should be studied) and, increasingly, government and industry (e.g. funding of research into natural flood management). The power to influence what a scientist does is not distributed equally between people, or the environments that scientists study. This raises the question as to who or what is able to influence what scientists do; and the inevitability of such influence upon the knowledge that is produced. Rather than naively assuming that any kind of geographical research can be politically neutral, we need a more critical Physical Geography, one that actively and reflexively challenges the assumptions and directives that we take for granted.

The third challenge is to recognize that our research has impact. Even research undertaken in “pristine” environments (e.g. ice sheet mass loss) has implications that can travel (e.g. to impact policies to mitigate rapid sea level rise). Whilst the science-policy linkage of some such research may remain weak, where that linkage is stronger we need to become more sensitive to the consequences of what we do, and the ethical issues that then follow. Human geographers have become highly sophisticated at doing research “with people” rather than “on people” (e.g. participatory



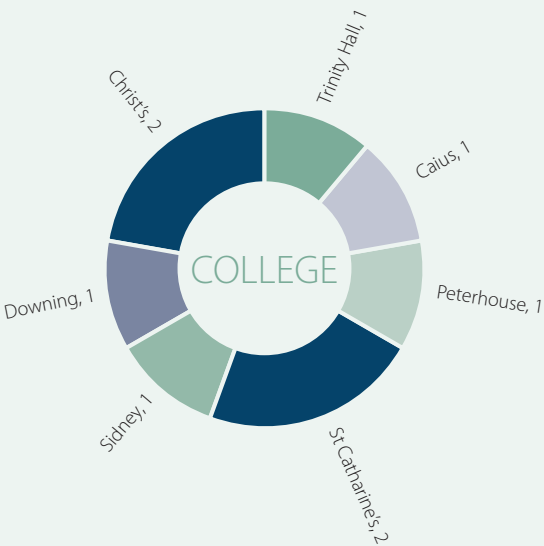
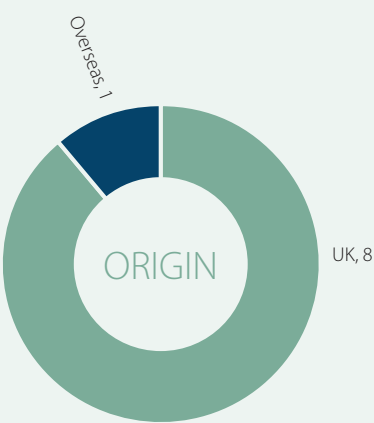
*Arolla, 1989- the author is standing second from right*

action research). Physical geographers much less so, even though it is a necessary requirement of a science that engages with where people live, and in the rare cases where it has been attempted some surprisingly profound policy implications have resulted. It is simply not clear that the impending catastrophe of global change will ever be addressed unless we can find ways of placing our current lifestyle choices in meaningful tension with their consequences for the environment and eventually for us. As Sheila Jasanoff has argued, this requires us to reintroduce local meaning into global challenges and to accept that a sustainable future can only be achieved if it is founded upon a more just and secure world today.

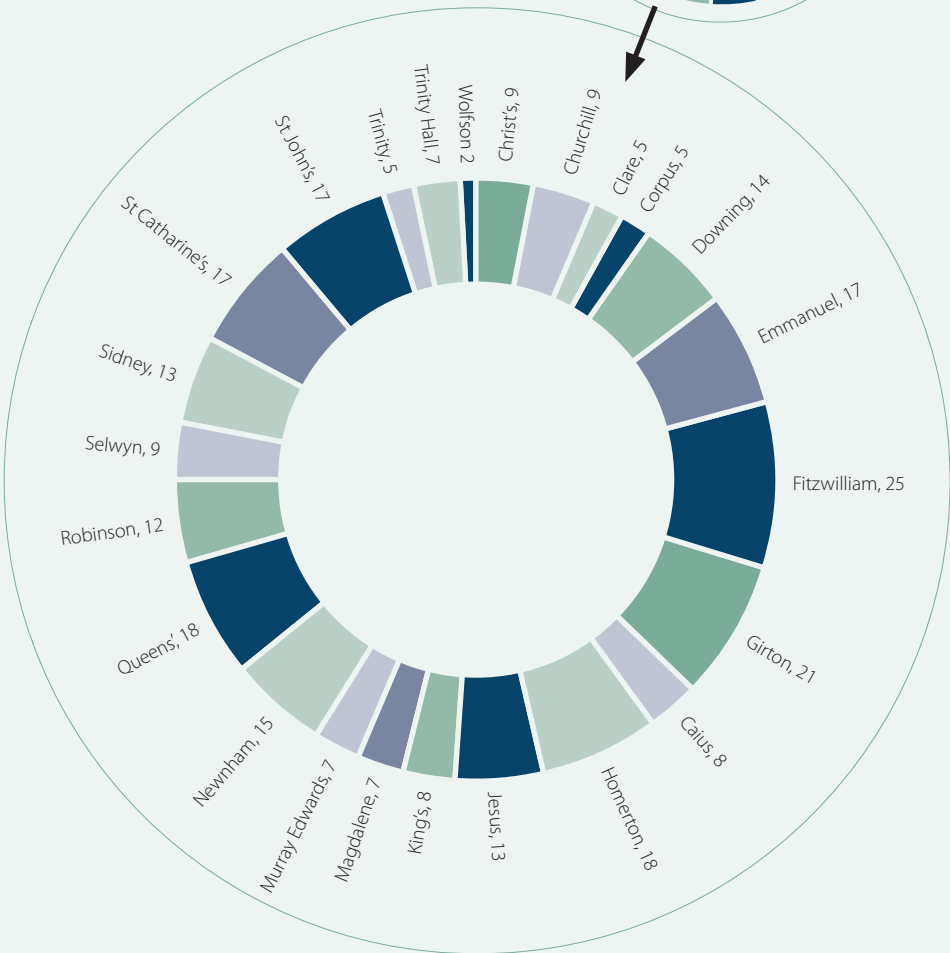
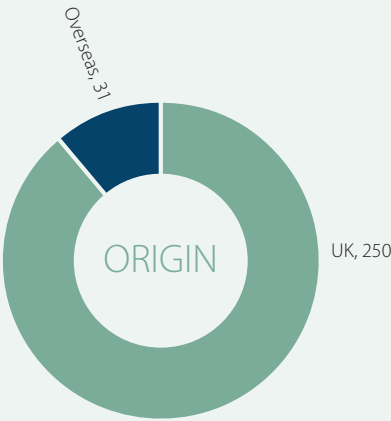
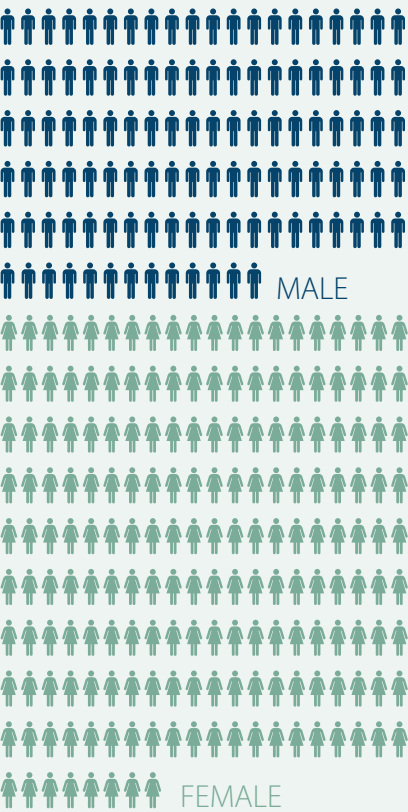
Realising these challenges requires physical geographers to return to being more and not less scientific. The potential of the empirical project, upon which modern science is founded, is realised when we allow what we study, humans or non-humans, to speak back, to slow down our thinking and reasoning and, in the words of philosopher Isabelle Stengers (2005, 994), “... to arouse a slightly different awareness of the problems and situations mobilising us ...”. My own mistake, in 1989, is a parody such a mobilisation as it caused me to re-orient my own interests away from cities and towards glaciers. The skill of allowing a pebble, or a glacier, or a tree to speak back (metaphorically) is the physical geographer’s trade. What makes this trade unique is the opportunity to practice it in intellectual spaces that are only lightly policed by disciplinary constraints and where this intellectual freedom allows development of the kind of integrative interdisciplinarity that the world so urgently needs.

# Student cohort: 1919–2019 in figures

1919 – 9 students



2019 – 281 students





# Colouring pencils at the ready... the first Tripos exam paper in full

## **SPECIAL EXAMINATION IN GEOGRAPHY OR THE ORDINARY BA DEGREE**

**WEDNESDAY**, *June 2, 1920, 9-12*

### **PHYSICAL GEOGRAPHY**

1. How do you account for the fact that the west coast of Africa at the tropic of Cancer is dry while the east coast of China in the same latitude has a heavy rainfall?
2. Explain why landmasses in general heat and cool more quickly than the sea. Illustrate the effects of this circumstance by reference to the distribution of temperature in the British Isles.
3. Draw diagrams showing the general vertical distribution of temperature in the Atlantic Ocean along the parallels of 20°N and 50°N and explain the differences between them.
4. Explain the formation of the Norfolk Broads.
5. How are escarpments formed? Draw a diagrammatic section across England showing the principal escarpments.
6. What differences may be noted between an ordinary river-valley and a valley which has been occupied by a glacier?

**WEDNESDAY**, *June 2, 1 ½ - 4 ½*

### **HISTORICAL AND POLITICAL GEOGRAPHY**

1. Show how physical features have affected the relative growth of Boston, New York and Philadelphia. Account for the position of the capital of the UA.
2. Discuss the variations in the extent of territory to which the name 'New South Wales' has been applied at different times.
3. Discuss the extent to which natural features have been utilized in fixing the frontiers of Canada.
4. What European languages are spoken in South America? Account for their distribution.
5. Give a brief sketch of the stages leading to the formation of the Union of South Africa.

**SATURDAY**, *June 5, 1920, 10-12*

### **PRACTICAL EXAMINATION**

From a point *A* upon the bank of a river the bearing to *B* is found to be 120° and the distance of *B* is determined (with a range-finder) to be 2600 yards. These observations are taken to be correct.

From *A* a compass traverse is made by boat down the river to *C*, and from *C* the traverse is continued on foot alongside a tributary stream to *B*. From the field-book supplied construct a sketch-map on the scale of 4 inches to a mile, correcting the closing error before inserting the details (but without rubbing out the uncorrected traverse lines).

The map may be finished in pencil, ink or coloured crayons. Accuracy and clearness should be aimed at, but highly finish draughtsmanship is not required.

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“It is a grand world we live in,  
full of beauty, interest and pleasing  
prospects. Who would not be a  
geographer with this whole, wide,  
vivid panorama as his field, places  
and peoples and occupations,  
and all the sights and sounds  
and smells that combine into an  
atmosphere peculiar to each part?  
The aim of the geographer is to see  
clearly and to see whole; to climb  
the peak for the whole view, not to  
dally in the pleasant valleys below.”

Frank Debenham 1949

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