
CAMQUA

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GODWIN INSTITUTE FOR QUATERNARY RESEARCH

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Stage Three Project on the Home Stretch

Early in the final autumn of the 20th century and the 2nd millennium, the Stage Three Project, after four years of compiling data bases and constructing and testing palaeoclimatic and palaeoenvironmental models, crossed a major watershed marked by an great sign saying "Beyond lies only interdisciplinary intercourse!" At the first stop in this new land we were amongst our own, scientists all, not afraid of jargon and lingo and math and speculation, and we generated with joy a long, long list of intended publications, each crowned by an absurdly early completion date, each authored by a team enriched by at least one member who knew little about the subject. But such is the spell of the land of interdisciplinary intercourse that we did not fear nor did we think very deeply.

At the second stop we sat down with a band of archaeologists, anthropologists and mammalian palaeontologists eager to see our list and to be instructed in what we had learned on their behalf. And such was their enthusiasm that it was a pleasure to see. Once more it generated a long, long list of manuscripts, each graced with at least one author who knew little or perhaps even nothing about archaeology, anthropology or mammalian palaeontology, and topped with an early, oh so very early deadline. So on we went into the dark, cold winter and it was so dark and so awfully cold that all interdisciplinary conversation ceased - actually, to tell you the truth, nearly all communication ceased - until the warmth of the late spring thawed us all out and we looked once more at the two lists and found that we had been too optimistic, so much too optimistic that only three manuscripts of the long, long list had been submitted for publication.

Well, it is a pleasure to report here that matters got better, a statement you may confirm that if you wish by looking at STAGE THREE NEWS 11, posted in October on the Stage 3 website at:

<http://www.esc.cam.ac.uk/oistage3/Details/Homepage.html>

There you will discover that of twenty-eight planned manuscripts three were then in press (of which two have since been published in *Quaternary Research*), seven had been submitted (plus one more now), and only five carried the humiliating label "whereabouts unknown" and may still do so.

That, however, is not the whole honest story, because a curious contagious disease has afflicted the authors of several of the palaeoclimatic and palaeoenvironmental manuscripts, unfortunately especially those that are of critical importance for the main papers that must cope with the ultimately archaeological objectives of the Stage 3 Project. The disease, of which the most striking symptom is a belief that the patient feels sure that he or she can not possibly write clearly and intelligibly for a readership of archaeologists, anthropologists and mammalian palaeontologists, seems to be winding down but has not fully disappeared.

It also gradually dawned on us that if we were to succeed in writing a coherent story about what happened to the Neanderthals and our ancestral humans that would not require each reader to study the work with a large pile of other publications by his or her side, we needed to take another look at the "book" question. And so we have after all ended up with a BOOK (the publisher is still to be decided). But it will not be the customary monumental work entombing forever all we have done, including much that, if we have done our work properly, will already have been superseded by the next steps forward. It will be a smallish book, focussed on the archaeological questions we asked at the start so long ago, enriched by just precisely as much palaeoenvironmental "stuff" as is needed for the story of human failures and successes, and written for a much, much broader readership than scientists alone. SO THERE, the best laid plans of man and ape... etc. the rest escapes me.

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I do not wish to give the impression that the Stage Three Project has, in the end, turned out to be seriously or even moderately flawed. It has not and in fact, our wish to ask better questions has been fruitful as a device and has raised questions well beyond our expectations. Perhaps some bonus better answers may yet emerge before the BOOK must be submitted to the press.

Therefore, it seemed right to celebrate the Projects' end by some sort of song and dance, the end that will itself gently come during this second year of the 21st century. This terminal song and dance, for the sake of symmetry, will take the form of the First Godwin Conference on Stage Three and Its Human Population, the one that in 1996 set the goals for the Project and enticed many of our co-workers. The Second Conference will describe, weigh, critique, annotate and, I hope, like our work and our results a bit and perhaps lay out some paths towards the nearby future.

The Second Godwin Conference on Stage Three to be held on June 20-22, 2002 is an open meeting, although Project Members will do all presentations; the details, my reader, you can find on its web site.

<http://www.campublic.co.uk/2002/stage3/>

Tjeerd H. van Andel

QRA MEETINGS

Annual Field Meeting & AGM

2-5th April 2002

Aberystwyth

Contact: Danny McCarroll, Department of
Geography, University of Wales
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<http://www.qra.org.uk/WestWale.htm>

Short Field Meeting, Weimar, Germany

12-17th May 2002

Danielle Schreve, Rich Meyrick

<http://www.qra.org.uk/Weimar.html>

QRA Annual Discussion Meeting

Constructing Quaternary Chronologies

3-5 January 2002, Oxford

'Worth Making Time For?'

A number of the Cambridge contingent from all parts of the GIQR – Geography, Earth Sciences, Zoology, BAS – attended the QRA Annual Discussion Meeting at the start of January in Oxford on “Constructing Quaternary Chronologies”. This was a very well run and interesting meeting, which revealed the wide range of geochronological work being undertaken at the moment. What follows is merely cherry-picking of an important and informative meeting. For a full rundown, you'll have to read the report in QN when it comes out!

One of the things which struck me most was the contrast between the increasingly small advances in increased precision in radiocarbon dating; and the large strides in understanding and accuracy that seem to be taking place in other dating techniques. For example, workers in the Late-glacial and Holocene periods often require precision of less than 20 years, yet the uncertainties from dating different fractions of the sediments, and from calibration are significantly larger than this. An example of the former problem was highlighted very well by John Lowe – which ages do you believe when even different beetle species from the same horizon are yielding different ages? Examples of calibration-related developments Maarten Blauw's presentation on wiggle-match dating; also Chris Ramsey's discussion about decreasing calibrated ranges on dates which are in sequence. In respect of Late-glacial chronology, and the oft-quoted supremacy of the ice-core time-scale, Claus Hammer's gave much food for thought by suggesting that even this might be problematic.

What I thought was more interesting, however, were the dating techniques which have been used over longer time-scales. Geoff Duller gave a fantastic talk about the immense changes which have been taking place in optical dating, which mean that it is now possible to undertake a number of replicate measurements on a single sample. He challenged the radiocarbon community by likening this to undertaking several hundred radiocarbon determinations on a single sample. A particularly exciting new development is dating of single sand grains, which could potentially help to decrease problems of partial bleaching.

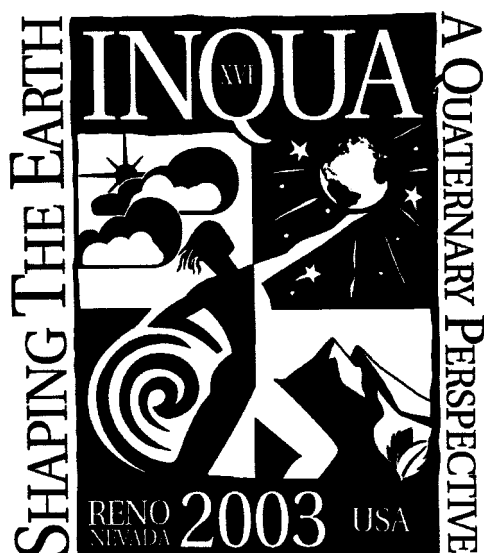
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A further interesting talk was by Alastair Pike about U-Series dating of bone, where he showed that the present models of Uranium-uptake by bone during burial were simplistic and flawed. The new physically-based model which he presented could not only accurately predict Uranium-uptake; but also allow screening for and rejection of those bones where uptake has not occurred in a predictable fashion during burial.

A number of talks also focussed on amino-acid dating, stating some of the reservations with the technique that many have had for some time. There was hope, however, in the shape of Matthew Collins. Although he baffled many with the biochemical details, it was reassuring to know he was in charge of a lab, and was thinking and understanding more of the basic principles. One example of this was his suggestion for sample preparation which ensures that samples are taken only from that part of the shell which can be said to be a truly closed system.

The increase in length from 2 to 3 days to accommodate lab visits on the Friday afternoon had some drawbacks, such as more people than usual leaving early or only attending part of the meeting. However, it was good to have longer talks, and some space in the programme to digest what we had been hearing. And I can't think how to get it in seamlessly, but it does deserve a mention. The drinks reception on the first night was great, and in a lovely setting of the University Museum – chatting beneath a large T-Rex is a novel experience!

Becky Briant



JULY 23-31, 2003

For more information visit:

<http://www.dri.edu/DEES/INQUA2003/inindex.html>

Baltic Sea Science Congress

Stockholm, 23-29 November
2001

The attractive campus of Stockholm University was the venue for a major conference on the Baltic Sea, attended by several hundred scientists including Martin Head, Chris Glaister and Kirsty Simpson of the Quaternary Palaeoenvironments Group in Cambridge's Geography Department. The congress addressed a wide range of interests from pure biology and environmental themes to sedimentology, geology and hydrography, all presented as a series of concurrent symposia and workshops. Our main interest was the Baltic Sea Geologists Symposium which showcased the latest research of BALTEEM (BALTic during the EEMian), the EC-funded programme led by Phil Gibbard of the Geography Department. Six talks were given by BALTEEM members, beginning with a presentation by Karen Luise Knudsen that served as an excellent overview of current knowledge. Irina Delusina demonstrated some of the difficulties in correlating high-latitude pollen assemblages in the Eemian, and of integrating existing Russian records. Leszek Marks discussed interglacial river systems in the southern Peribaltic area (Poland), and Svend Funder wowed the audience with a molluscan tour-de-force from the Belt Seas to the White Sea. Svend showed that a connection indeed existed between the Baltic Sea and White Sea for a short period during the Eemian but that exchange of waters was not particularly significant. The theme of Eemian Baltic Sea hydrography was next addressed by Martin Head (with Phil Gibbard and Kari Grøsfjeld) who used dinoflagellate evidence to assess palaeotemperatures and palaeosalinities for sites in the southwestern and southern Baltic and the White Sea. Results were shown to corroborate those based on molluscs but refined the picture through finer-resolution sampling and by introducing surface-water rather than bottom-water reconstructions. Laimdota Kalnina completed the session by discussing her doctoral research on marine Eemian sequences from western Latvia and the Gulf of Riga. Excellent posters by Chris Glaister, on the geographical distribution of pollen across the Baltic region during Eemian time, Karen Luise Knudsen and colleagues on a review of the Eemian of the Baltic Sea, and Arto Miettinen and colleagues on diatom hydrographic reconstructions for the Eemian of the eastern Baltic, completed the strong BALTEEM representation at this congress.

Above all, the congress offered an opportunity for biologists, environmental scientists and geologists to share information and exchange views. *Continued overleaf...*

And for those seeking a little time off from the congress, the Vasa Museum in Stockholm features the world-renown royal ship-of-the-line that went down in 1628. The Baltic Sea Science Congress, far from going down in 2001, will remain alive through a planned proceedings volume which is scheduled for a special issue of **Quaternary International**.

Martin Head

Research Assessment Exercise 2002

The results of the recent Research Assessment Exercise (RAE) were published in January 2002. There was a mixed outcome for the Godwin Institute's constituent Departments, as shown below in comparison to the previous exercise. With the exception of Geography, all Departments either maintained their 5* rating or improved. Geography was awarded a 5, rather than the previous 5*. It is probable that this relates to the recent extensive restructuring of the Department and (at the time of assessment) the existence of two vacant chairs in physical geography.

Department	1996 result	2002 result
Archaeology	5*	5*
Earth Sciences	5*	5*
Geography	5*	5
Plant Sciences	4	5
Zoology	5*	5*

The article below comes from the 14/12/2001 edition of the Guardian, and was contributed to this edition by Phil Gibbard

A Private Affair

Citations analysis is like sex. It's normal to be interested, and even enjoy it, but it is best done behind closed doors, with no more than two people in the room, not talked about afterwards, and very definitely not turned into a ranking (not even in the Guardian) in the newspapers.

The appropriate use for citations data is in private discussion between a department chairman and a dean, to decide whom they should promote or hire, and that is all. Citation analysis has its uses, but should be kept in the background of life. If brought to the foreground, it distorts what people do.

The same kind of problem crops up with one of the depressing events of UK academic life, the RAE, which

is here once more. The most depressing, of course, is the unmentionable "Scottish play" (the Q*A).

Our job in British universities is to do real work, not to be obsessed with ordering people and departments and institutions. The more all these league table things are debated and brought to the front of people's minds, the more time Britain's self-interested individuals will spend in trying to wheedle their way up some ranking by crook or by double-crook. And they do. I believe this is corrupting and inefficient. The whole tendency is a growing problem and I hope this RAE is the last.

It never once occurred to me when I was a 26-year-old writing about economics that one day somebody would be counting up how many times my name was mentioned in people's reference lists. Yet the young, in 2001, do think that. So they will soon end up doing all sorts of distortionary things (getting their friends to cite them gratuitously and much worse). All this is deeply against the spirit of universities - which have always been institutions where the bottom line, not the flim-flam and the puffery, is what counted and what should continue to distinguish us from most of the business world, for instance. That bottom line is to make discoveries about how the world actually works.

Right. What are we to make of these RAE results?

First, how dull it all is.

Second, fortunately it is not all bad. Let us remember, for a moment, a really good university like Essex. I am a huge admirer of the place. Yet many youngsters and parents are unaware how good it is. The RAE method is to be congratulated at least for allowing such a professional university to shine. Economics at Essex has, for instance, this year beaten the departments at both Oxford and Cambridge. A 40-year-old institution decks ones about 800 years older - not bad. This is where the RAE scores score. They provide a meritocratic bugle for a university to blow as hard as it can. Let us hope parents listen.

The economics at Essex story is writ large across the RAE results - there are many smaller triumphs too, and those have their place in the orchestra.

Cambridge continues to be a powerhouse and because I am a meritocrat I admire much of that. We ought to applaud brilliance and success, and I do. But I cannot help wondering, sometimes, whether the bucks might not bang louder if some of the enormous wealth were moved over to the universities begun in the 20th century. We have no check on what one might call the deep efficiency of universities.

My main intellectual objection to the RAE-style of doing things is that it is far too egalitarian. In other words, it

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spreads the cash too widely across our 100 universities (sorry).

Here is why. Citations analysis shows us a pretty frightening picture. For instance, one man, DH, is worth in my kind of area of life about as much on his own as the research done by 80 British universities. Yes 80. In truth, in university research in almost any subject in the world, just about everything rests on the shoulders of about 100 creative folk. It is not sensible to dwell too much on this if one wishes to remain sane and cheerful.

However, I predict that one day this glaring skewness in intellectual output - sharply evident from citations studies - will have to find its way into funding allocations more effectively than can be achieved in the RAE.

Efficiency is a scary concept. So inegalitarian. So meritocratic.

Best kept behind closed doors very probably.

Article by Andrew Oswald, a professor of economics at Warwick University

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Professor Dowdeswell back in Cambridge!

Professor Julian Dowdeswell has started a new post at the Scott Polar Research Institute. He is a glaciologist, working on the form and flow of glaciers and ice caps and their response to climate change, and the links between former ice sheets and the marine geological record, using a variety of satellite, airborne and shipborne geophysical tools. Prof. Dowdeswell is not new to Cambridge as he completed his PhD here and was Assistant Director of Research at SPRI between 1992 and 1994. Until his recent arrival in Cambridge he was Professor of Glaciology and Director of the Bristol Glaciology Centre, University of Bristol. Welcome!

Diary Dates

Department of Geography

24/1/02 Bryn Hubbard, University of Wales
'Direct measurement of basal sliding at temperate glaciers'

14/2/02 Brian Dade, University of Cambridge
'River process and form on multiple scales'

21/2/02 John Boardman, University of Oxford
'Flooding & Property Damage in Sussex 2000-1:'

is this climate change?

All seminars at 4.15pm in the seminar room, Department of Geography.

Department of Zoology

7/2/02 Chris Stringer, Natural History Museum
'Progress and problems in modern human origins research'

Held at 5pm in the Advanced Lecture Theatre, Department of Zoology.

HELP EXPAND OUR CIRCULATION!

Although most of you find CAMQUA in your pigeonhole, you may have picked this issue up from one of a variety of high class common rooms in the University. If you think CAMQUA is the newsletter for you, or know of someone who should be reading this, contact the editors at the

It's your CAMQUA!

Camqua wouldn't exist without your contributions. In order to carry on we need more involvement from all relevant departments (Zoology, Earth Sciences etc). Always of use are reports on meetings or conferences. Don't presume someone else is already doing one, get in touch with your editors and volunteer! Invariably, we will gladly accept!

Deadlines

Copy for the next issue of ***Camqua*** should be submitted by **26th April 2002** to the editors at the Geography Department.

Credits

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Phil Hughes (pdh27@cam.ac.uk)

Camqua would like to thank the Department of Geography for generously supporting the production of this issue.

QUATERNARY DISCUSSION GROUP

LENT TERM 2002

All meetings are held at 8.30pm at Clare Hall West Court, at the far end of Herschel Road, Cambridge.

For further details contact Richard Preece; rcp1001@cus.cam.ac.uk

February 1st

Land and Sea march to the same drum: marine pollen record off Portuguese coast reveals rapid vegetation responses to north Atlantic climate changes during the last 65,000 years.

K.H. Roucoux

February 15th

Climate control on Interglacial fluvial sedimentation in lowland Britain

P.L. Gibbard

March 1st

New OSL dates from Swanscombe and Boxgrove: confidence and conflicts

E. Rhodes