



20 May 1992

DEGREE CEREMONY AT SINGLETON

Roy Armstrong, the founder of the Weald and Downland Open Air Museum at Singleton received the honorary degree of Doctor of Letters at a special ceremony held at the museum last week. Now in his 90th year, Mr. Armstrong (pictured right) still plays an active role in the running of the museum of historical buildings, which was established in 1970 in order to encourage awareness of the built environment.

Mr. Armstrong's interest in vernacular architecture and its rescue in the face of modern planning was fostered at the end of World War II, and his anxiety about the fast disappearance of historic buildings led to the creation of the Committee for the Promotion of an Open Air Museum for the Weald.

Over the last 20 years the museum has grown and developed but has always remained true to the vision of its founder. First, buildings should be preserved *in-situ* and only removed to the museum as a last resort when destruction is inevitable and, second, the museum

should awaken the public interest in the humbler but nevertheless important examples of the region's architecture and so encourage people to fight to preserve buildings in their own neighbourhood. In addition, like all good museums, it is a place of research where students of vernacular architecture can study techniques and consult the library.

Director of the Centre for Continuing Education Mr. Fred Gray said, "Roy Armstrong has been of immense importance, not only in establishing the wonderful Open Air Museum at Singleton, but also for many decades as a popular Sussex history writer and adult education tutor in the county."

Receiving the degree, Mr. Armstrong spoke of the various ways in which Sussex has been involved with the museum from the beginning and expressed his hopes for increased collaboration. "My hope," he said, "is that



during the present year we shall get a great deal further in defining the kind of co-operation and mutual help to be aimed at, and, one hopes, implemented, in the future."

PRIZE MONEY DONATED TO STUDENTSHIP SCHEME

Emeritus Professor of Biology John Maynard Smith has donated £70,000 to the University to set up a new postgraduate studentship scheme.

Professor Maynard Smith, who came to Sussex as the first Dean of Biological Sciences in 1965, decided to make the donation after being awarded 350,000 Swiss Francs last year as winner of the Balzan Prize — a prestigious international award given by the Italy-based Balzan Foundation for distinguished work in either the arts or sciences.

The studentships, which will cover both fees and maintenance, are to be offered for postgraduate research degrees within the School of Biological Sciences. Although no field of study is stipulated, applications would be particularly welcomed for work on evolution and ecology — Professor Maynard Smith's own areas of

scholarship.

Funding will come from the interest accrued on the donation, enabling the scheme to continue indefinitely. If a suitable candidate comes forward, the first Maynard Smith Studentship will be awarded in October with a subsequent award being offered once that first student has completed his/her research.

Professor Maynard Smith said he was delighted to be able to help future research students in his School. "What would I do with all that money?" he asked. "I'm only giving away about half of it, the rest I'm enjoying!"

David Streeter, Pro-Vice-Chancellor (Science) said, "It is very appropriate that John Maynard Smith's name should be perpetuated within the School and the University in this manner. It will also ensure that those aspects of biology with which he is particularly associated will benefit from his generosity."

Anyone interested in applying for a Maynard Smith Studentship should contact Professor Chris Darwin, Dean of BIOLS, for further details.

A GLOW OF SUCCESS

In the first of a series of articles looking at research at Sussex, the award-winning science writer John Gribbin talks to Frank McCapra, Professor of Chemistry, about his work.

When Frank McCapra completed his PhD studies in 1962 and, looking for an intellectually challenging piece of work as his next scientific project, decided to try to find out what makes fireflies glow, he never imagined that the work would lead to a multi-million dollar industry, improved methods of medical diagnosis, and tobacco plants that glow in the dark. Yet, 30 years on, all that has become reality, and there are further developments of the application of chemiluminescence to look forward to.

There could hardly be a better example of the value of 'blue sky' scientific research, commenced purely out of intellectual curiosity. It is easy to imagine, indeed, the prospect of funding for a post-doctoral researcher to spend time chasing fireflies with a butterfly net being laughed out of court as a waste of public funds.

The young researcher with the butterfly net was based in Baltimore in 1962, and spent four years in Canada working on other topics before coming to Sussex and taking up chemiluminescence as his life's work in 1966. The first phase of this work involved taking the chemistry

out of biological systems, and recreating the firefly's glow in the test tube. Glossing over all the interesting chemistry, in nature an enzyme known as a luciferase encourages the oxidation of a molecule known as a luciferin, to produce an 'excited', or energetic, version of the oxidised molecule. This then emits its excess energy as a flash of light.

Having found out how to do this trick in the test tube, McCapra's team then set about putting the firefly's chemistry back into living things — but not back into fireflies. Obviously, a firefly naturally produces both luciferase and luciferin, and you can't get the chemical glow without both. So you can get the flash of light where and when you want it — which is where the technique becomes a diagnostic tool in medicine.

The technique amounts to 'labelling' interesting molecules with a chemiluminescent compound, then adding reagents and using the resulting light pulse to find out what the interesting molecules are up to. One example can be found in some forms of thyroid disease, including the illness that George Bush suffers from. The diagnostic kits based on the Sussex invention were used in the treatment of both the President and Mrs. Bush. It is important to find out how much thyroid stimulating hormone (TSH) is circulating in the patient's blood. The usual trick used to be to take a sample of blood and treat it with a compound containing radioactive iodine that sticks, at a molecular level, to the TSH. By analysing the radioactivity of the sample, you can work out how much TSH there is.

But there are snags. The difficulties and dangers associated with even this routine medical use of radioactive iodine were sharply highlighted after the Chernobyl accident. Then, in order to find out just how much radiation from Chernobyl had fallen in the rain on Wales, researchers measured a 'control' sample from people and animals in Weybridge, where no radioactive rain had fallen. To their surprise, they found *higher* radiation levels in the Weybridge population — and traced this to radioactive iodine from hospitals, that had got into the Thames and on into drinking water.



What makes a firefly glow?

Chemiluminescence can do the same job of measuring TSH. The technique is faster, more convenient, more sensitive, and safer than using radioactive iodine, which is why it is now widely used in the US and France, although as yet only occasionally in the UK.

Where do the glowing tobacco plants come in? This development has not been carried out at Sussex, but stems from the same work. Genetic engineering is now well up to the task of splicing in a gene for make luciferase to the DNA of a tobacco plant, and the plant will then glow if it is fed with the appropriate luciferin in its water. Only slightly tongue in cheek, some researchers have suggested developing glowing plants that could be used to line motorways and cut down on lighting bills.

And the future? Asked to elaborate on his wildest dreams, McCapra suggests that this safe and increasingly simple technique might be used to label and study the chemicals involved in transmitting signals along nerves, and even, ultimately, to measuring the changes that take place in the brain as it learns new tricks. The old cartoon idea of a bright light appearing over a character's head when she comes up with a bright idea might yet be put into practice. And the warm glow on a student's face during a tutorial could reassure the tutor that there was some brain activity going on, after all.

John Gribbin

RUNCIMAN AWARD

International Relations Lecturer Dr Mark Mazower of EURO has won the Runciman Award for his book *Greece and the Inter-War Economic Crisis* (OUP 1991). The £1,000 prize is awarded annually for the best book on anything to do with Greece.

STUDENT FINANCE

Professor Rupert Wilkinson will be carrying out research on student financial aid at two American colleges in July with a small research grant from the Nuffield Foundation.



Hilary Day

GOLD FOR STUDENT

Experimental psychology student Hilary Day collected her hard-earned Duke of Edinburgh Gold Award at St. James' Palace recently.

Hilary, a second year undergraduate in the School of Biological Sciences (BIOLS), spent two years working towards the award for which she had to demonstrate success in a skill and physical recreation (in her case, the piano and swimming) and perform community service work. The expedition and residential project sections of the award took Hilary to mid Wales where she undertook a four-day 50 mile hike carrying a full back-pack.

"It was very hard work but I would recommend it to anyone," said Hilary who is keen to encourage other Sussex students to take part in the Duke of Edinburgh Award Scheme. Anyone interested in finding out more should contact her through BIOLS pigeon-holes.

POPLOG WINS AWARD

The organisations marketing the software product POPLOG — Integral Solutions Ltd (ISL) and the University of Sussex — are to receive one of this year's ICP Five Million Dollar Awards.

POPLOG was created at Sussex within what is now the School of Cognitive and Computing Sciences. It is marketed to British academic institutions by the University, which has licensed marketing to non-academic customers (and to universities outside the UK) to ISL, a Hampshire-based company many of whose staff were previously with the University. ISL is a management buy-out of the former POPLOG section of SD-Scicon, and this company is also recognised by the Award. The ICP

SAFEGUARDING THE NATTERJACK

A project to safeguard the future of the natterjack toad — one of the rarest amphibians in the world — is to be based at Sussex.

The natterjack, which is recognisable by a yellow stripe on its back, can be found in just 17 countries including Britain where it likes to make its home in selected coastal areas.

In recent years, however, its numbers have fallen still further despite having protection under the 1981 Wildlife and Countryside Act.

Last year, amphibian expert Dr. Trevor Beebee, of the School of Biological Sciences (BIOLS), warned Council of Europe members that the natterjack faced extinction on the Maharees peninsular of Ireland because of unhindered golf course development.

In recognition of the scale of the problem, the Nature Conser-

vancy Council for England has now asked Dr. Beebee to co-ordinate a recovery programme for the amphibian.

The work will include a substantial research component such as support of genetic studies on surviving populations of natterjacks using modern biochemical and molecular methods.

"We will also be re-introducing the toads to sites managed specifically for them," explained Dr. Beebee.

The Nature Conservancy Council initiated the Species Recovery Programme last year with the express aim of rehabilitating Britain's most endangered species of plants and animals.

The natterjack is one of just 20 species funded by the Programme, which also includes the red squirrel and the dormouse, and the contract awarded to Sussex is worth more than £95,000 over three years.

LORD JUSTICE BUTLER-SLOSS TO SPEAK ON CHILDREN ACT

The Rt. Hon. Lord Justice Butler-Sloss, one of the UK's leading authorities on family law, is to give the annual Wynne Baxter Godfree public law lecture at the University this Friday.

Dame Elizabeth Butler-Sloss will speak and deal with questions on the Children Act, which is now beginning to alter significantly the way in which family law operates. As chairman of the Cleveland Inquiry on child abuse, Lord Justice Butler-Sloss influenced and shaped many of the provisions included in the Children Act. After serving as a High Court Judge in the Family division she became the first woman to be appointed as a Lord Justice of Appeal.

The lecture will take place at 6.00 pm in the Molecular Sciences Lecture Theatre (not 5.30 pm in Refectory Terrace Room as previously advertised) and is open to all.

Award salutes cumulative sales of over US \$5,000,000 for this product.

POPLOG is a robust software development system which permits integrated software development using a variety of languages, including international standard languages such as Common Lisp and Prolog as well as the advanced British artificial-intelligence language Pop-11, itself a COGS creation.

Successful applications of POPLOG across various sectors to date have included systems for electronics design, real-time process control, image processing, financial pattern recognition, weld defect identification, aircraft maintenance, and many others using a mixture of artificial-intelligence and traditional software techniques.

The ICP Five Million Dollar Award will be presented on 12 June at the Café Royal in London.

Around the Schools

COGS

COGS is currently preparing two new MSc degrees due to receive their first intake of students in October. The philosophy inspiring the MSc in Human Centred Computer Systems is that computers should be designed to assist people. That slogan is easy to state, but hard to implement. The new degree will demonstrate how to apply techniques from psychology and cognitive science to the design of interactive computing systems. The course includes a project using advanced software tools to develop a prototype computer system that is productive, empowering, and easy to use.

The second new degree, the MSc in Programming Languages, is a conversion course which will prepare mathematically sophisticated graduates to do research and development work on practical and theoretical aspects of programming languages.

We have been doing well recently in the ever-fiercer competition to get contributions accepted at conferences. Five faculty and graduate students gave papers to the Linguistics Association of Great Britain, in April. For the International Conference on Artificial Neural Networks, to be held in September, 13 papers were submitted from COGS; remarkably, *all 13* have been accepted!

Some recent activities of individual School members include:

Harry Barrow has just been offered, once again, an unrestricted (and unsolicited!) award by the Schlumberger Foundation to support his research; the amount this time is \$30,000. He gave invited talks on 'Networks' to the McDonnell-Pew Summer School in Cognitive Neuroscience, University of Oxford, and on 'Neural-level models of early vision' to the British Machine Vision Association and to the Centre for Neural Networks, King's College London, in October and November.

Maggie Boden has been elected a Fellow of the Royal Society of Arts and has just heard that she has been elected a Member of Council of the Royal Institution of Great Britain. Her new book *The Creative Mind* (Basic Books, New York) has also appeared in Dutch translation. Maggie was recently a guest on Radio 4's 'Start the Week', and was Guest of the Day on BBC Radio Sussex; she appeared on a BBC2's 'The Late Show' programme on Willem de Kooning in October, and was interviewed by Belgian TV in November on artificial intelligence.

Some of her many recent outside lectures have included 'What is computational psychology?' at a British Academy Conversazione; 'Dangers of over-reliance on expert systems' at the International Congress of Scientists and Engineers, Free University of Berlin; 'What is creativity and can we measure it?' at an International Workshop on the Measurement of Achievement, and an invited address on the Peer Review system to the All-European Academy Meeting held at the Royal Swedish Academy of Sciences, Stockholm.

Andy Clark has been awarded a Senior Research Leave Fellowship by the Joint Research Council Cognitive Science/Human-Computer Interaction initiative. This will pay for a lecturer to cover Andy's teaching load for the 1992-93 academic year, freeing Andy's time for research. Andy and **Rudi Lutz** have co-edited a book, *Connectionism in Context*, just out from Springer.

Dave Cliff presented a paper on 'Neural networks for visual tracking in an artificial fly' at the First European Conference on Artificial Life, in Paris in December (this was the topic for which Dave was awarded the AISB Prize for the best presented paper at the 1991 conference of the Society for Artificial Intelligence and the Simulation of Behaviour).

Steve Easterbrook gave a paper on 'Resolving requirements conflicts with computer-supported negotiation' at the Workshop on Requirements Engineering, Oxford University, in December.

Roger Evans gave a paper on current developments in DATR at the University of Düsseldorf in November.

Gerald Gazdar became Chairman of the Joint Research

Council Initiative in Cognitive Science and Human-Computer Interaction from October 1991. He convened two workshops for the ESRC on 'Interaction Mediated by New Technology'.

Helen Petrie's research on male and female names was featured on Radio 4, after she presented a paper 'On the psychology of names: a boy named Sue?' at the British Psychological Society conference at City University in December.

Haider Ramadhan was given an Outstanding Student Paper Award for his paper on 'An Intelligent Discovery Programming System' at the Symposium on Applied Computing, Kansas City, in March.

Edmund Robinson spoke on 'Functorial parametricity' (co-authored with P. J. Freyd and G. Rosolini) at the Peripatetic Seminar on Sheaves and Logic, Edinburgh in November; on 'Functorial parametricity revisited' at Manchester University in December; and on 'An introduction to powerdomains' at the British Computer Society-FACS Christmas Meeting, City University.

Yvonne Rogers has two new books out: *A Guide to Usability*, co-authored with D. Benyon, G. Davies and J. Preece (Open University Press) and *Models in the Mind*, co-edited with Andrew Rutherford and Pete Bibby. She gave a talk on 'Distributed cognition' to the Social and Applied Psychology Unit, Sheffield University, in November.

Geoffrey Sampson was an invited participant at the International Workshop on European Corpus Resources, Pisa, in January.

Allen Stoughton spent the Autumn Term on leave as a Visiting Researcher at the University of Darmstadt.

Des Watson gave a paper on 'Unix at Sussex' to the British Computer Society in October.

David Young spoke on 'Why computer vision is more than image processing' at Racal Research in October, and on 'Computer vision for road traffic monitoring' at the School of Computing Studies, Leeds University, in November.

Nicola Yuill has a new book out, co-authored with Jane Oakhill of BIOLS, entitled *Children's Problems in Text Comprehension*. It is published by Cambridge University Press.

At the Brighton Festival, Professor Willie Lamont shared a platform with, amongst others, Lord Beloff and Professor John Burrow at a seminar organised by the Montpelier Society. The seminar, called 'Made in Britain', reflected the European flavour of the Festival and that 1992 is the year of the Single European Act.

The Chairman of the Seminar, Sir Derek Spencer QC, is the newly elected MP for Brighton Pavilion. He introduced Lord Beloff who spoke on 'The Uniqueness of Britain's Constitution'. Professor Lamont gave a spirited paper on 'Natural Rights in 17th Century England and Europe' and Professor Burrow gave an excellent paper on 'The Idea of an English Political Tradition', demonstrating that members of the University, although a part of the fringe events at the Brighton Festival, are never on the fringe when it comes to ideas — they are at the centre of what is happening.

Last month's 'Women in Britain 1914-1945' conference, organised by Sybil Oldfield and Pam Roue, proved highly successful. Welcoming conference delegates, Councillor Pat Hawkes spoke briefly about the part women had played in education — particularly apt as she was to be elected as President of the National Union of Teachers at their conference a few days later. Many complimentary letters were received from delegates: "a most inspiring conference", "the conference was highly enjoyable from start to finish", "the best planned and organised academic get-together I have ever attended", and, finally, "as a specialist in the 1918-38 period I found it immensely valuable and I do hope that there will be a follow-up in two years' time ...". So it looks likely that this is the first of many conferences yet to come.

Sybil Oldfield's book *Women against the Iron Fist — Alternatives to Militarism 1900-1989* (Basil Blackwell) has recently been translated into German and has received much publicity and favourable reviews in papers as varied as *Die Zeit* and the feminist *Emma*.



From left: Miss Olessia Nazarova, Professor Boden, Dr. Vitaly Gorokhov, School Secretary Jane 'Espinasse and Dr. Irina Alexeyeva.

RUSSIAN PHILOSOPHERS VISIT COGS

Three Russian philosophers have been visiting the School of Cognitive and Computing Sciences (COGS) this term as part of an initiative aimed at establishing regular collaboration between Sussex and Moscow.

Dr. Vitaly Gorokhov, Director of the 'Philosophy of Technology' Research Group in the Institute of Philosophy at the Russian Academy of Sciences, together with Dr. Irina Alexeyeva and Miss Olessia Nazarova, who are both members of the group, have been attending lectures and research seminars in the School. Dr. Gorokhov, who is also the Scientific Director of the International Ost-Akademie for Science, Education and Technology Transfer in Bruchsal, Germany, gave a seminar on information technology at the COGS research seminar. Both Dr. Alexeyeva and Miss Nazarova gave brief talks to the Philosophy Society.

The visit was funded by the British Council and the British Academy and follows a trip to Moscow in 1990 by Margaret Boden, Professor of Philosophy and Psychology at Sussex, when she was a participant in a 'Round Table' held at the Institute of Philosophy on the philosophy of artificial intelligence.

Professor Boden said the visitors had met COGS members and it was hoped that future co-operation would be possible. "We are exploring the possibility of initiating a fairly regular programme between COGS, the current research group and a new Centre for Higher Education in the Humanities which is being planned in Moscow within which Dr. Gorokhov would hold the Chair in the philosophy and history of science and technology," she explained.



A high-spot of the PGCE Silver Jubilee celebrations on 24 April was a performance by pupils from Meridian County Primary School, Peacehaven, of Jonah-Man Jazz by Michael Hurd. They were directed and conducted by Andrew Thomas, a current PGCE Primary student.

MULTIMEDIA GAINS MOMENTUM

The burgeoning interest in multimedia at the University has seen the formation of a new group. The **Multimedia Group** currently consists of participants from COGS, SOCS, CCS, Media Services and Enterprise in Higher Education. It welcomes anyone interested in multimedia to its next meeting on Tuesday, 2 June, where several multimedia applications will be demonstrated (details below).

Multimedia is the combination of two or more audio and visual media under the control of a computer. With careful planning and design, text, sounds, graphics, animation, photographic and video images can be made available to the user in the form of presentations, interactive tutorials, audio-visual databases, games and simulations. The process of preparing, designing and developing multimedia applications is called authoring, and it is becoming easier for non-programmers to author multimedia applications due to the proliferation of easy-to-use graphical tools, often based on the 'point and click' principle of Windows. So, students or staff with the subject knowledge can prepare their own applications, even incorporating material from other sources (copyright permitting).

There are already a number of projects throughout the University involving the use, development and application of multimedia to specific tasks, problems and issues.

THE SOCIAL SCIENCES MULTIMEDIA PROJECT

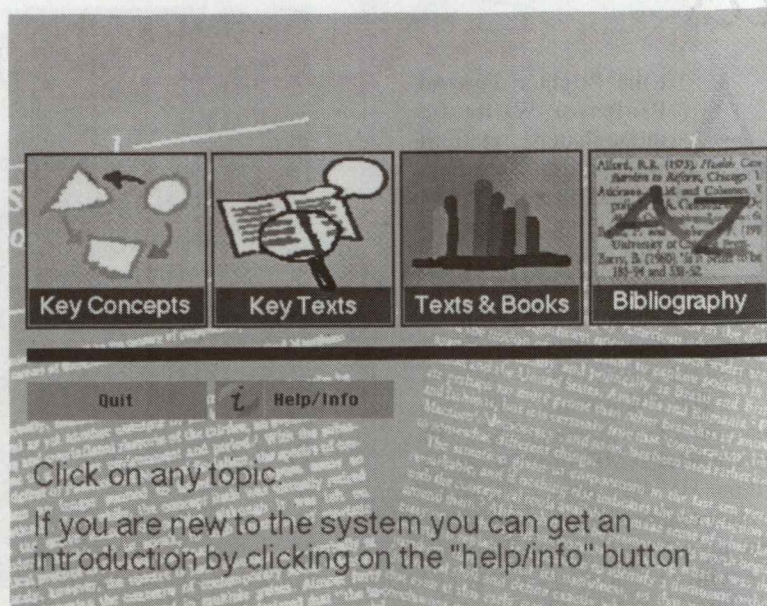
This aims to build and evaluate a prototype 'electronic book' intended for Social Science students, which incorporates full texts, articles, audio-visual learning material and a complete bibliography. The 'electronic book' is on the subject of 'Corporatism' — the study of the relationships between organised interest groups and the state in contemporary industrial societies. It provides an interactive learning environment in which the learner can access the fundamentals of the subject, through an audio-visual component, as well as providing an easily accessible storehouse of study material with hypertext links.

The system is being prototyped on a Macintosh IIsi using SuperCard and Macromind Director authoring tools. It contains: audio-visual presentations on the main concepts of Corporatism, making use of audio narrations, animated text and diagrams; audio-visual presentations discussing the main texts of Corporatism; a 'library' containing the most important books, papers and articles, excerpts of which can be laser printed; a comprehensive bibliographic database with over 800 entries on Corporatism, which can be queried in various ways.

SCHOOL OF COGNITIVE & COMPUTING SCIENCES

COGS has a long-standing interest in multimedia, through its research in computer vision, intelligent tutoring systems and human computer interaction. The POPLOG computer environment, developed at Sussex, has recently been enhanced to support multimedia design. It provides on-line documentation and help, closely integrated with other computer facilities such as electronic mail, word processing and the ability to run programs from within a document.

The Hypermedia in Poplog (HiP) project is developing multimedia extensions to POPLOG which will mix



text, sound and graphics with artificial intelligence software.

Other multimedia projects in COGS include a toolkit to assist in the design of graphical user interfaces and a computer-based tutor for radiology.

ENTERPRISE IN HIGHER EDUCATION (EHE)

This initiative seeks to develop among students, skills relevant to work, by means of curriculum change, staff development and the involvement of employers. An important aspect of this is the use of innovative teaching methods and learning strategies, such as interactive multimedia and other forms of technology supported learning. Interactive learning technologies, such as Interactive Video, Computer Based Training and CD-I are becoming increasingly popular among employers and employees for training in a wide range of skills and expertise. Programmes cover personal qualities like assertiveness, management skills such as interviewing methods and more technical subjects, including accounting and quality assurance.

MEDIA SERVICE UNIT

The effectiveness of any multimedia program is achieved not only by good design and relevant content but also by the quality of the images and sounds used. The Media Service Unit offers professional level facilities and expertise for the production of audio-visual material which can be sampled and digitised ready for computer manipulation.

One project under development in the Unit is the use of computer controlled images to teach dance. Video recordings of dancers are digitised by computer so that the complex movements can be broken down into their constituent actions. Simple computer animation is also used to illustrate the movements. Dance teachers can then replay these images and animations at a variety of speeds to examine the movements while learners practice by copying them. If cameras are used to video learners' actions, the animation can be superimposed in real time, allowing the dancer to make immediate comparisons.

MULTIMEDIA GROUP, c/o William Locke,
Arts D422, ext. 8533.

Next meeting: Tuesday, 2 June, 12.30 pm, Arts D440. (Please notify if you are coming as numbers may be limited.)

FISHY BUSINESS IN ZAMBIA

While most of us were opening presents and tucking into our roast turkey, Sussex researcher Elizabeth Harrison spent her Christmas day in a thatched hut in the heart of southern Africa, listening to Kings College Choir on the BBC World Service and, she admits, getting very homesick.

Now back in England after six months field-work, Elizabeth is enjoying a few home comforts in between writing up her report before returning to Zambia to continue her research next month.

The field-work forms part of a three year study of aquaculture — or fish farming — in Africa which is being funded by the Overseas Development Administration (ODA) through the Institute of Aquaculture at the University of Stirling. Based in the School of African and Asian Studies (AFRAS), the project is being co-ordinated by Dr. Jock Stirrat, an anthropologist, together with Elizabeth who is the principal researcher on the study.

As she explained, small scale aquaculture has been promoted in Africa with optimistic promises of increasing food security, providing a source of cheap protein and strengthening the livelihoods of the rural poor. Yet, after three decades of international aid to African aquaculture development, many donors and planners feel that the rewards have been few and far between, with ventures collapsing and ponds being abandoned.

Lessons from the past suggest that the technical feasibility of aquaculture is not a sufficient condition for its successful development. "There has been a failure to explore and understand the social and cultural contexts in which the technology is to be developed; the needs, constraints and aspirations of the intended beneficiaries," said Elizabeth. Consequently, the AFRAS project aims to address those issues by looking at the factors influencing decisions on adoption and levels of 'success' in fish pond developments in the Luapula Province of Zambia.

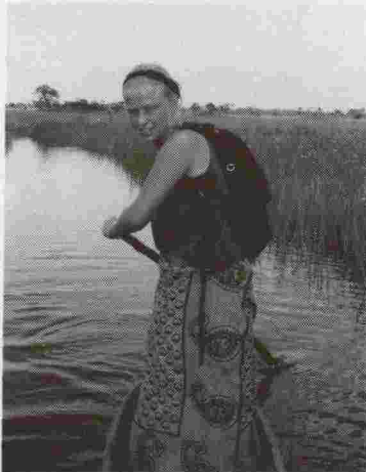
Elizabeth's field-work to date has involved living among fish farming communities in two Lua-



Women harvesting fish from one of the village ponds

pulan villages — Kaseke, a small village with about 25 households and the slightly larger Chibote. Her findings will form the basis of recommendations which will guide the ODA's future policy.

Unlike many other parts of Africa, Luapula has a relative abundance of resources although these



Punting along in Zambia — Elizabeth's undergraduate days in Oxford came in useful.

are not always well distributed and there are seasonal shortages. "There is still malnourishment but, despite some major problems, Luapula does have plenty going for it," said Elizabeth.

The dietary staple is cassava, supplemented with millet, maize, groundnuts, and a limited number of vegetables. Like many of the villagers, Elizabeth had her own vegetable plot in Kaseke and was encouraged to use not only fertiliser but also witchcraft on the land to stop her vegetables growing in other people's gardens! "Most of the food is delicious," she said, "but I drew the line on fried caterpillars

and termites. I did try them once, out of politeness, but the villagers understood when I said I had a psychological problem with such food."

Elizabeth, who holds an MA in Gender and Development from the Institute of Development Studies (IDS), will be tackling a wide range of research issues including gender dimensions of aquaculture development. For although they are in the minority, there are female, as well as male, fish farmers in Zambia and others contribute unpaid labour to their husbands' ponds.

However, as Elizabeth discovered, working relationships were not always harmonious. "I took a photograph of a husband and wife harvesting their fishpond together which the promoters of aquaculture would think depicts a good example of how couples can work in partnership," she recalled. "The truth was, though, that two hours earlier the wife had told me she was leaving because her husband had been discovered with another man's wife. The only reason they were draining the pond was so he could pay a fine to the aggrieved husband."

As the only white person who had lived within their isolated communities, Elizabeth says she was regarded with "amused tolerance". "I got to know the local people very well and I made some very good friends." So much so that, since arriving back in England just a month or so ago, Elizabeth has already received four letters from one of the villagers, keeping her up-to-date with the local gossip in anticipation of her return.

NEWS FROM THE
COMPUTING SERVICE

WITHDRAWAL OF VAX SYSTEM

The VAX Cluster system which served as the University's main computing service from 1981 until the introduction of the new service, SOLX1 last year, will be withdrawn from service on Friday, 31 July.

Anyone who has information on the VAX system and wishes to transfer it to the new system (or to any other computer) must do so as soon as possible. Please contact the Computing Service Help Desk if you want further information. The Help Desk, which is in the Computing Centre (MOLS 1), is open between 10.00 am and 4.00 pm each weekday (tel. 2959).

Workshops to help people wishing to use SOLX1 are offered throughout the Summer Term. The workshop covers a number of topics including an introduction to the UNIX operating system which is used by the Computing Service's

two central services, SOLX1 and SYMA, as well as the Service's workstations. The workshops are on Tuesdays and Thursdays between 9.30 am and 10.30 am, again in the Computing Centre. Booking is not required; you are welcome to attend whenever it is convenient.

USING COMPUTERS FOR LANGUAGE TEACHING

A visit by members of the Computers in Teaching Initiative (CTI) Centre for Modern Languages and Centre for Textual Studies has been arranged for Thursday, 11 June.

The CTI's aims are:

to encourage the development of computer-assisted teaching and learning in UK universities,

to evaluate the educational potential of information technology at UK universities,

to promote an awareness of the potential of information technology (IT) among lecturers and students in all disciplines.

The Centre for Modern Lan-

guages, which is based at the University of Hull, has been in operation since April 1989 and now holds a considerable library of computer software for language teaching in higher education. Software is available for French, German, Italian, Russian and Spanish.

The Centre for Textual Studies, which is based at the University of Oxford, was established in October 1989. Its remit covers all aspects of the use of computers in the teaching of literary and linguistic skills in all languages studied in UK universities and the use of computers for teaching in the following text-based subjects: philosophy, logic, theology, and theatre arts and drama.

This visit, which has been arranged by the Computing Service and the Language Centre, provides an opportunity for academic staff at Sussex to see how computers can be used in teaching within the disciplines covered by the two centres. Contact Roger Discombe (tel. 2953) for further information about the visit or the Computers in Teaching Initiative.



NEWS FROM THE GARDNER CENTRE

It's 'One for All ... and All for One' on Saturday, 30 May, with the Gardner Centre proving there is life after the Brighton Festival!

From the makers of 'Thunderbirds F.A.B.' comes another glorious technicoloured theatrical spoof in the form of Alexandre Dumas' swashbuckling tale of adventure — 'The Three Musketeers'. Join in the intrigue, swoon at the swordplay and gasp at the amazing costumes as Athos, Porthos, Aramis and ... the other one, foil, outwit and defy the machinations of Milady and Cardinal Richlieu.

Between them, Gavin Robertson, Andrew Dawson and Robert Thirtle (pictured above) play all the Musketeers, three women, Cardinal Richlieu, the Duke of Buckingham and a whole host of guards and miscellaneous characters. The pace is swift, the music epic and the show colourful, comic and cartoonlike.

The performance starts at 7.45 pm and tickets are £7.25/£5.25 (conc. £1.00 off) from the Box Office on 0273 685861.

Anne Burrill

PUBLIC LECTURE

John Venables, Professor of Physics at Sussex and Arizona State University, will give a Professorial Lecture on *Internationalism in Science* at 6 pm on 2 June in the Molecular Sciences Lecture Theatre. Admission free.

STAFF
DEVELOPMENT

We are hoping to organise a Skills Exchange Network. Are you prepared to coach others (informally and for a fee)? At the moment we are looking for help with shorthand.

I intend to offer courses for faculty members on the following: the role of the Personal Tutor; developing learning skills; group work — approaches; group work — assessment; working with mature students; project work; managing stress. I need some indication of (a) demand and (b) possible timing.

If you are interested in either of the above, please contact me, Andrew Hood, on ext. 3849 or Alison Lyner on ext. 3806 (mornings).

SHORTLISTED

Sussex psychologist Jane Ussher's latest book *Women's Madness: Misogyny or Mental Illness* was recently shortlisted for the MIND Book of the Year Prize.

The book was one of three finalists chosen from a field of over 60 entered for the award which is presented annually to the book which makes the most significant contribution to public awareness of mental health problems.

Dr. Ussher, a lecturer in the School of Cultural and Community Studies (CCS), attended the ceremony at the Photographers Gallery in London last week where the prize was presented by Melvyn Bragg to the winning author, Benedicta Leigh for her autobiographical work *A Catch of Hands*.

LANDRANGER PRIZE

Computing troubleshooter William Craven from MOLS found his trip to the Geography Laboratory most rewarding when the Landranger Challenge caught his eye.

He correctly identified all 24 clues on a cryptic course around Ordnance Survey 1:50,000 sheet 198 Brighton and The Downs and succeeded in a tie-break to win the prize of a full colour poster of the earth taken from space in the form of a spectacular 36" x 24" electronically created photo-map mosaic.

Runner-up Neil Brown (CCS) also submitted a full correct entry and won a bottle of wine. Other praiseworthy efforts came from third-year geographers Timothe Biggs (SOCS), Sue Lilley (CCS) and Louise McKnespiey (CCS), all of whom were just one clue short of returning the perfect answer sheet.

EQUAL OPPORTUNITIES

An informal group has been meeting the Personnel Officer and the Admissions Officer to discuss equal opportunities for staff and students within the University. It is putting together initial proposals for further discussion within the University on equal opportunities issues, with the aim of improving the University's equal opportunities activities. In particular, it is hoped that the University will extend its current policy, which only covers staff, to include students.

Members of the group, who come from a variety of areas within the University have suggested the following issues might need to be addressed:

training and awareness, including equal opportunities awareness for all those involved in recruitment and admissions;

The MOLE

A new column aimed at stimulating the readership of the Bulletin with uncensored satire and a bottle of champagne to the winner of the competition.

The finding that there are ripples in the background microwave radiation that bathes our universe has caused intense excitement. That we were all ready to be so excited was evidenced by the large turnout at Professor John Barrow's Inaugural lecture last February, on matters cosmic (and, apparently, everything else). So it is now accepted that the universe is the product of a Big Bang some years ago, and that its existence is destined to cease some years hence (the Big Crunch). A question which, although not addressed by the Galactic Ripple, has perplexed many is this: what came before our universe, and what is to come after?

The Mole has been reliably informed that before the Big Bang which brought our own universe into being there were other big bangs, each one the bearer of a new universe; a universe which eventually died, leaving behind a vacuum (no less) from which new universes were to spring. An infinite number of universes preceded our own, and an infinite number will follow. On the (infinitely long) way to producing the works of Shakespeare, the monkey and the typewriter produce several near-copies. Similarly, in the infinite sequence of universes, several close copies of our universe have been authored by that fateless monkey. Worse (or better, depending on which universe you inhabit), there must have been a universe, identical to ours, except that we were all three points higher on the salary scale and semesterisation was nowhere in sight.

Turning away from the origins of the universe and the Big Bang (the date on which trimesters will spontaneously transform into semesters, causing ripples to undulate through the fabric of universities for years to come), we turn to the origins of this column. The Bulletin believes in keeping up with current trends, and aims to stimulate its readership by offering a bottle of champagne to the winner of this column's competition. Like your local free newspaper, there is some doubt as to whether anyone actually reads the Bulletin (and since it lacks those all-useful cinema listings, the free newspaper may be a better deal). The offer of a bottle of champagne should up the ratings.

The competition this week is based on the Galactic Ripple described earlier: as we use larger and more accurate telescopes, we shall be able to resolve much finer detail in the ripples. Indeed, it won't be long before we can 'see' the echo of homo erectus emerging from the slime. But who will be the first recognisable historical figure (past or present) to be observed over the Ripplescope, and what will he/she be doing? Planning semesterisation perhaps?

Entries, addressed to 'The Mole', with name and address, to arrive at the offices of the Bulletin (Room 230, Sussex House) by noon on Friday, 29 May. The Mole reserves the right to drink the champagne him/herself if no suitably enlightening entries forthcoming.

monitoring, e.g. of the relationship between background and progress, graduate employment; achieving a representative balance in terms of gender and ethnicity among staff and students, and overcoming the problem of 'artificial ceilings'; childcare facilities; flexible work and study; meeting the quota of registered disabled employees; physical access; harassment.

Further suggestions on these or other issues would be most welcome, and should be sent to the secretary to the group, Beatrice Merrick, Admissions Office, Sussex House. Other members of the group who may be contacted with comments are: Bob Savill (Students' Union), Janet Stuart (ICAPE), Richard Price (Staff Welfare — Arts B), Carolyn Morris (CAS).

NOTICEBOARD

RECENT BOOKS

New publications by Sussex authors include:

The Creative Mind by Margaret A. Boden. Cardinal. New in paperback, £6.99.

Long-Run Economics: an Evolutionary Approach to Economic Growth by Norman Clark and Caelestous Juma. Pinter. Paper, £11.99.
Dance and the Body Politic in Northern Greece by Jane K. Cowan. Now in paperback. Princeton U.P. £11.95.

Sea Changes. British Emigration and American Literature by Stephen Fender. Cambridge UP. £40.00.

Appraising Primary Headteachers by Eric Hewton and Neville West. Open UP. Paper, £12.99.

Text and Voice: Essays by Gabriel Josipovici. Carcanet Press. £25.00.

The Economic Legacy, 1979-1992, edited by Jonathan Michie. Includes a contribution by John Toye on 'Britain, the United States and the World Debt Crisis'. Academic Press. Paper, £9.95.

Understanding Information. Business, Technology, and Geography, edited by Kevin Robins. SPRU contributors include Asu Aksoy, Tim Brady, Bernard Harbor, Mark Matthews, Ian Miles and William Walker. Belhaven. £39.50.

Property, Bureaucracy and Culture: Middle-Class Formation in Contemporary Britain by Mike Savage, James Barlow, Peter Dickens and Tony Fielding. Routledge. £40.00.

Governing the Market: Economic Theory and the Role of Government in East Asian Industrialisation by Robert Wade. Princeton UP. Paper, £15.95.

The Social Psychology of the Primary School by Colin Rogers and Peter Kutnick. Routledge. Paper, £10.99.

Macbeth: Contemporary Critical Essays in the New Casebook Series. Edited by Alan Sinfield and with several Sussex contributors. Macmillan. Paper, £8.99.

All available from Sussex University Bookshop

A celebration of the life of Anita Cotis, student in Afras from 1988 to 1991, who died recently, will be held in the Meeting House Chapel this Friday, 22 May, at 3.45 pm.

VACANCIES

The Personnel Office has issued the following summary of posts to be filled. Advertisements for these vacancies have been placed in local and national papers as appropriate, as well as being circulated as relevant to Section Heads and union representatives for circulation to staff and noticeboards. Copies of these advertisements, further particulars if available, and application forms can be obtained from the Personnel Office, Room 227, Sussex House. This list was compiled on 8 May and is subject to revision.

Teaching Faculty

Lectureship in Social Anthropology, 1 year fixed term

Research and Analogous Faculty Post-Doctoral Fellow, Surface Physics, 1-2 year fixed term — contact Dr. R. H. Milne, MAPS Research Assistant, Soc Sci, 18 months fixed term, part-time, Japanese speaking

Clerical & Secretarial & Related Housing Assistant, Residential Services, full-time, grade 3

Storekeeper, Estates, f/t, grade 2/3
Receptionist, Information Office, f/t, grade 1

Manual and Ancillary Staff

Porter, ENGG, part-time, grade 2 — contact Deputy Laboratory Superintendent

IDS

2 or 3 f/t in-house Research Assistants (one an economist), one-year from Oct. or Jan. Contact Rosalind Woodhouse, Personnel Office, IDS. Closing date: 26/5/92.

FINALISTS

Two one-year placements are available in Sussex House, starting in September. Salary: £11,500.

One, in the Information Office, would be suitable for a finalist interested in a career in the media, public relations or journalism. Further details from Sue Yates, Information Officer, ext. 8384.

The second post is for a Student Recruitment Assistant in the Admissions Office and would suit a numerate person interested in University administration or marketing. Further details from David Cunningham, Assistant Registrar, ext. 3733.

KULUKUNDIS GROUP

AGM, Thursday, 4 June, 6 p.m.
York House Television Room.
Food and drink available. All members of the University welcome.

LIBRARY NEWS

Tehm Framroze, Sub-Librarian since 1977, and Assistant Librarian for nine years before that, is to take early retirement this summer.

This year the Library will be open (1400-1830) on the second May Bank Holiday Monday. It will also be open, usual weekend hours, every weekend of term, including the final one (20/21 June).

The Library basement snack bar (now a 'no smoking' area) has extended its opening hours:

Mon - Thurs. 9.30 am - 8 pm,
Fri. 9.30 am - 6 pm.

ANNUAL BARLOW LECTURE

The 1992 Barlow Lecture will be given by Miss Margaret Medley, former Curator of the Percival David Foundation of Chinese Art, who will speak on 'Decoration in 16th Century Chinese Porcelain'.

The lecture will take place on Thursday, 28 May, at 6 pm in Arts A1 Lecture Theatre. Admission is free of charge.

The Barlow Gallery holds some 400 works of art covering every period of China's history from the 12th century BC to the 18th century AD. It is situated in the Library Building and is open on Tuesdays and Thursdays 11.30 am to 2.30 pm (except August). Admission is free.

BULLETIN

Copy for the next issue of the *Bulletin*, to be published on 10 June, must be received by Jenny Payne, Internal Communications Officer, Room 230, Sussex House, by no later than 1 pm on Friday, 29 May. If you have any news items or ideas for feature articles, she would be pleased to hear from you (ext. 8208).

A vacation issue of the *Bulletin* will be published on 8 July (copy date 26 June).

The *BULLETIN* is for the information of staff and students of the University of Sussex. Published by the Information Office. Campus photography by the Photographic & Design Unit. Printed by the University of Sussex Printing Unit.

PRINTED ON
RECYCLED
PAPER



University of Sussex, Sussex House,
Falmer, Brighton, BN1 9RH.