Pandora’s Books

Poems, stories, diaries and dramas collected over a year have been pressed into a box of six books – Pandora’s Books – a series of volumes being launched today in Brighton. The books contain original material produced by the East Sussex writers-in-libraries workshops and writing groups and courses throughout the county, including the University: Pandora’s University of Sussex Book is one of the volumes in the series. The theme for the series, which is edited by Richard Crane, Lecturer in Creative Writing in CCE, was writing in response to reading. Writers were invited to submit original work which had been stimulated by a book or piece of writing they had read; the results are inspired by material as various as Kipling, Jane Austen, the Highway Code and the Ikea Catalogue.

Pandora’s Books will be launched at Waterstone’s Bookshop at 7.30 on Friday 23 May and at the De La Warr Pavilion, Bexhill-on-Sea on Saturday, 31 May at 7pm. Copies of the books will also be on sale from the University Bookshop.

Sussex Establishes Science Centre for Schools

Sussex is establishing a Centre for Creative Science for school and college students. The Centre will enable students to be involved in designing, setting up and running experiments that they can’t carry out at their school or college.

Dr Jonathan Hare and Professor Sir Harry Kroto have already been extensively involved in allowing students to experience ‘real science’ through talks and experiments in local schools. Their goal now is to establish a centre that can receive parties of students and stimulate them to be imaginative and creative in their approach to science. Angmering School have already benefited from the project - after a talk at the school, sixth form chemistry students adapted their laboratory equipment so that they could produce soot samples that should contain the new form of carbon, C60. They brought their samples to the University where, using a mass spectrometer, the chemists proved that the students had succeeded in their efforts to produce buckyballs.

Other schools are already approaching the University, hoping to use the Centre, which Jonathan Hare will manage. He sees it as an opportunity to shift the emphasis in science education towards imagination, ingenuity and creativity. “It’s imperative that people make things – they get so much out of it. Even if it’s just a radio they learn about electronics and the physics of radio waves. They also learn about research: if it doesn’t work, it doesn’t matter.”

Schools generally lack the resources to allow students to play with science and thus develop a ‘feel’ for the exhilaration and the frustration of scientific research. The Centre will allow the students access to the University’s academic expertise within a safe and well-equipped environment.
RIPENESS IS ALL

‘Her flame coloured hair and ruby lips contrasted brilliantly with the verdant background of the downs and the azure of the heavens above. He thanked God he was not a sheep.’

Most of us (except the ‘colour blind’) take for granted the ability to discriminate between red and green. We share this ability with apes, old world monkeys, birds, bees, many butterflies and fish, but not with sheep and many of our other fellow mammals.

Although colour vision is widespread, it seems likely that it had to be re-evolved in mammals because of our nocturnal ancestry. Most mammals are dichromats: that is, they have two sorts of cone receptor which respond to short wavelength (blue) light and medium/long wavelength (yellow). We, together with apes and some monkeys, are trichromats: we have three types of cones, sensitive to short (blue), medium (green), and long (red) wavelengths. This is very helpful with traffic lights but, according to Daniel Osorio of BIOLS, seems to have evolved primarily as an adaptation to a fruit-eating lifestyle. For trichromats, ripening fruit (usually red, yellow or orange) stands out in clear contrast against a background of leaves. Paintings by Henri (Le Douanier) Rousseau, particularly his jungle paintings, illustrate the effect this has on us, seeming to penetrate directly to the seat of a deep and primitive emotional response.

Life may be even more colourful for animals that have more than three types of receptor. Some butterflies have five but at present the prize seems to go to a mantis shrimp which was found, by Justin Marshall of the IRC, to have at least twelve. Many birds and insects have receptors which extend colour vision into the ultra violet. The most important function of colour vision, says Daniel Osorio, is in signalling between animals and between plants and animals (ripe fruit colours may originally have co-evolved with bird vision, and flowers with insect vision). We find our environment colourful because we are sensitive to this ‘visual shouting’ about ripeness and sexual availability. We also contribute, flashing signals at each other, but perhaps a little more discreetly than some of our monkey relatives. A response, originally associated with the love of ripe oranges, now alerts us to the charms of the opposite sex.

Letter

Greatly Respected (& Most Potent) Rodent:
You are fantastic! I hinted only ever so slightly (in my letter to you last month about the Knight’s Gates) that it would be nice to have glass in the railway station’s waiting room— and, less than a week later, the glass was there. What’s more, the station is being repainted in bright, cheerful colours. (Not purple, I notice, but that’s another matter ...)

Since you’ve been so successful in arranging all this, I fell to wondering (again) — this time about whether you could do something about the A27 pedestrian underpass. After the station the underpass is, after all, the next step in the Sussex experience for those arriving by train. I know you prefer to be up high and so shun subterranean places, so maybe you’ll not have been in the underpass recently, but believe me it is ‘rather a mess’. Yesterday I found myself hoping that most of those pleasant young potential customers who were here for the Open Day would not have noticed the mess because they were dazzled by the specially arranged sunshine.

But there’s another Open Day next month (when the weather may not be so good), and then in October all those smart Headmasters are coming — and they would be sure to notice litter and the graffiti in the underpass. (They might even make a note about it for use when they got home.) And who knows, Mr Blair might take it into his head to visit us in October too — and he’s sure to travel by people’s train, if only to please Mr Prescott. It would be nice to have things tidier by then! So, dear Cyril, I wondered if you could pull a few strings, or tweak a few tails, or whatever it is you do to get things done here.

Bob Young, University Library
Evolving the Chip

Researchers at the Centre for Computational Neuroscience and Robotics have developed a new technique for designing computer hardware. The revolutionary technique allows designers to specify the desired function of the computer chip and, by using a speeded up method of artificial selection, to evolve the "fittest" configuration for the chip. Such a technique has the potential to make computer chips much more efficient and far more robust than conventional design methods.

There are many advantages of evolved circuitry. Perhaps the most significant is that such chips make far more efficient use of their silicon when performing operations. Adrian Thompson, who developed the design method, says: "I have produced a circuit where, for a human to design it with the same resources, it would have taken 10 or 100 times more silicon to get the job done." This is because evolution can look at every possible kind of electronic circuit, whereas normal design methods only work within a small subset of possible circuits.

The technique relies upon a special kind of programmable chip that contains a number of modules and inter-connections. Using the appropriate coding these connections can be changed, altering the function of the chip completely. The evolution process exploits this by randomly generating a large number of possible configurations of the chip, checking each one to see if its behaviour resembles the desired result. Cross-breeding the best of these chips produces a new generation to be tried and tested. The process is repeated until the program finds the best possible configuration. Once a chip has been evolved to the designer's satisfaction the final product can be easily reproduced because its characteristics are contained in a set of binary instructions - a kind of computer DNA.

Evolved chips are far more robust than traditional hardware. A small fault within a standard chip causes the whole thing to stop working, but with an evolved chip the damage is limited to a small area. This could be valuable in applications such as space research, where it is difficult to avoid something getting broken and difficult to carry out repairs.

Gardner Freebies

Great new offers from the Gardner Arts Centre - free cinema and theatre tickets exclusive to readers of Bulletin. The first 15 people - first come, first served - at the Gardner’s Box Office with their copy of Bulletin, can claim a free seat for one of the following:

Films
Tuesday 27 May
7.45pm That Thing You Do
Thursday 29 May
7.45pm The Frighteners
Sunday 1 June
6pm Carla’s Song
9pm The Frighteners

Live Shows
Wednesday 28 May at 7.45pm
The Holmes Brothers (Blues and Gospel from the USA)
Friday 30 May at 7.45 pm
Anam (Irish folk)
Saturday 1 June at 7.45 pm
Jaleo (Spanish Flamenco)

Sussex helps with UV badge

Tim Metham of CPES has been involved in designing a new form of ultraviolet protection for sunbathers. He was approached by Bernard Hibbs, a GCSE student from Robertsbridge Community College, to assist with a Creativity in Science Technology (CREST) project - Bernard wanted to make something that would change colour according to the amount of UV radiation that it absorbed. Tim was able to point him to the right chemicals and assist him with developing a badge that would have the right properties to react to dangerous levels of UV radiation.

Bernard, who is just 15 years old, has been approached by the high street store Boots who are interested in developing the idea into a marketable product - it could be a useful tool for sunbathers who wish to monitor their exposure to the sun's harmful rays.

In brief

Research Opportunities

This is a selection of Research Opportunities. More details of these and other opportunities are available from Mylène Powell in the Research Grants and Contracts Office, ext 3812 or email M.Powell@sussex.ac.uk. For an extensive listing of funding opportunities see REFUND linked to the Research web site: http://www.sussex.ac.uk/units/research or USIS Home Page, select 'Teaching & Research', 'Research Funding at Sussex'.

The Welcome Trust Training Fellowships for Research into Mental Disorders: research proposals invited relevant to mental health or related basic science and the applicant should intend to continue research in this field. Deadline: 23 June.

Treaty of Windsor Programme 1998/99: Portugal/BRITISH COUNCIL: Applications invited in all academic disciplines. Applicants must have identified a Portuguese project partner who will be making a simultaneous application at the Portuguese end. Deadline: 30 June 1997.

Royal Society & British Association Millennium Awards: Funds are available for individuals and groups to equip them with all the resources they need to carry out winning ideas. Deadline: 30 June.

Management of the EPSRC Soil Programme: NERC is seeking an institution to host the scientific and administrative management of its Biological Diversity and Ecosystem Function in Soil Programme (worth around £6 million) due to commence later in 1997. The management contract will be run by a scientist who is organisationally and administratively competent. Deadline: 2 June 1997.

NHS Treatment of Mentally Disordered Offenders: bids invited from all individuals committed to developing new, evidence-based approaches for the treatment of mentally disordered offenders and others requiring similar services. Deadline: 6 June 1997.


MAFF Food Research Requirements 1998-1999: applications invited for research in many scientific disciplines across a wide range of food related topics, such as food quality and applied nutrition, food safety and food and meat hygiene. Closing date: 7 July 1997.
Monday 26 May – Sunday 1 June

Lectures, Seminars, Colloquia

■ Monday 26 May

■ Tuesday 27 May
3pm Sussex European Institute Research-in-Progress Seminar: Adam Watson-Brown (European Commission DG 13), EU policy-making for advanced television services. Room A71.

4pm COGS Seminar: Pasha Parpia (Visiting Fellow, Murdoch University, W. Australia), Modifications to the Kohonen Net to enable the simulation of self-organisation in the auditory cortex. Pevensey Building 5C11.

4pm South Asia Workshop: Yogendra Yadav, The changing face of Indian democracy: pointers from the 1996 election study. Room C351.


5pm German Research Colloquium: Nicholas Winton (Maidenhead), Bringing out the children: Prague 1939. Room A155.

■ Wednesday 28 May
1.30pm SCOAP Seminar: Dr George King (Manchester), Threshold photostimulation of atoms and molecules: dynamics and spectroscopy. Pevensey Building 2A2.

2pm USIE Graduate Research Centre in Education Faculty Research Seminar: David Stephens, Culture in Education and Development: a qualitative enquiry. Room EDB 204.

5pm English Graduate Colloquium: Francis Lo, Reading "Burke on the French Revolution" with "Burke on India". Room D640.

■ Thursday 29 May
11.30am Economics Faculty/Graduate Seminar: Diego Puga (LSE), The rise and fall of regional inequalities. Room D340.

4pm Laboratory of Experimental Psychology Colloquium: Eileen Joyce, Schizophrenia: cognitive function at first episode. Biology Lecture Room (EP3.9).

4.30pm Social and Political Thought Graduate/ Faculty Seminar: Fiona Robinson, Rethinking International Ethics. Room D630.

5pm History Work-in-Progress Seminar: Patrick Collinson (Trinity College, Cambridge), The Puritans and the poor. Room A5.

5pm French Research Group Open Seminar: Luca D'T Sauto (UC Berkeley), Aesthetics and the law of the other: on Levinas and Irigaray. Room A103.

■ Friday 30 May

2pm Science Policy Research Unit Seminar: Michael A. Mabe (Director, Materials Science Publishing – Worldwide, Elsevier Science Ltd, Oxford), Science, Government and publishing – the ghost in the machine. Room 121, EDB.


4.30pm Philosophy Society: Peter Osborne (Middlesex), Time and the Fractured Eye. Room A155.

Centre for Continuing Education

■ Day Schools at the University
Saturday 7 June
Introduction to Identifying Grasses
Late Modern Painting
Stress and Time Management
What are Lesbian and Gay Studies?

Saturday 14 June
Play Making
Modern Garden Design
Agriculture and Social Change in the Ouse Valley c1700-1930.
To enrol or for further information contact CCE on 67(82946) / 67(82527) or 67/8924.

Language Centre

■ Professional Interest Meeting
Saturday 7 June, 10am to 5pm. British Association of Lecturers in English for Academic Purposes, Training for EAP. Various speakers and workshops. Contact Margarita Khidhayr, Language Centre, ext 2003.

■ Languages for Pleasure
5-day Summer Schools in Japanese, Chinese, German, Spanish, Italian, Czech and French plus a French Drama Workshop. 30 June to 11 July, cost £85. If you are interested in these courses and the weekly courses starting in the Autumn, contact the Open Course Assistant on 67(8006).

Sports Events

■ Summer Sports Night and Barbecue
Wednesday 25th June at the Pavilion. 6pm Start. Teams required for Rounders, Volleyball, Bowls, Skittles, Boule and Darts. Entry fees £3.50 per person (includes food). Prizes for all winning teams. Limited number of places, so hurry and book in. For further details contact Karen Dunster 8228/3947, email K.Dunster.

■ Tennis Tournaments
Mixed doubles tennis tournament. 5.30pm Wednesday 28 May at the Pavilion. £1 per person. To enter ring Simon Tunley on 7230.

Britvic Mixed Doubles Trophy
Sunday 8 June at the Pavilion. Start 2pm. £2.50 per pair. Maximum 16 pairs. To enter and for further details contact the Sportcentre 8228.

■ Exams in the Sportcentre
Please note that examinations will be held in Hall II from 27 May to 2 June and 16 to 22 June, inclusive.

Miscellaneous

■ The New Metaphysical Art
Thursday 29 May at 4.15pm in the Gardner Centre. All welcome

DANCE PERFORMANCE:
SHORES OF CLOUD
Solo dancer: Amanda Banks in collaboration with composer Nathaniel Reed.

■ Lunchtime Recital
Tuesday 27 May at 1.20pm in the Meeting House Chapel. Graham Davies – Organ.

Small Ads

FOR SALE: light, very portable Amstrad NC100 computer with additional memory card. Ideal for use in libraries and lectures. Best used in conjunction with existing PC but could be used as only machine. £85. For further details, contact Leila Burrell-Davis, 8390, email l.burrell-davis@sussex.ac.uk

CAR FOR SALE: VW Passat 1983. Very reliable: has carried two profs since 1984. MOT and tax untill end September. Must dispose of on 31 May so £1000 ono. C.M.Goldie@sussex.ac.uk or (67)8311.


PAINTING, DECORATING and general house maintenance. Mature student with over 10 years' experience, excellent rates. Tel John on 67(8228).


FOR SALE: Amstrad PC 2086/30 (computer screen flickers occasionally) £50 ono. Heather Balkan, 4264.

CPES Research Fellow and spouse wish to care for small house with garden in Brighton/Howe area for a year or so. Please phone Sid in lab 67(8944) or email: kafk1@sussex.ac.uk

WANTED: 'au pair' for August – would suit research student. Farmhouse near Lewes. Ring Jane Andrew 478361.

FOR SALE: toys/kids stuff: tricycle (red, metal, with pushbar, rubber wheels) £15; bicycle (3-5 yrs, BMX style) £10; sit-ride toy £3; child car seat (-18kg, adjustable) £3; child bicycle seat (Romex, front mounted, adjustable) £15; potty/wC adaptor £2; Fisherprice motorbike (damaged front wheel) free; pushchair (needs fixing) free; also electric heater £4. Call 2263, email: safb5@sussex.ac.uk

SPANISH to ENGLISH translation. Spanish manuscript (300 pages) on human geography of Spain to be translated into English. Fee negotiable. Contact Russell King 8744; or 401013 evenings.

FOR SALE: four spring binders (type for submitting science DPhil's) £5 each. Contact Louise White 2831, email: louisew@biols

Bulletin
The Bulletin appears every Friday of term with copy deadline the preceding Friday lunchtime. We welcome suggestions for news, events, letters and small ads. Please contact the Information Office, Sussex House, on ext. 8209, or email: Bulletin@ sussex.ac.uk

Bulletin is now on the web: http://www.sussex.ac.uk/information_office/bulletin/