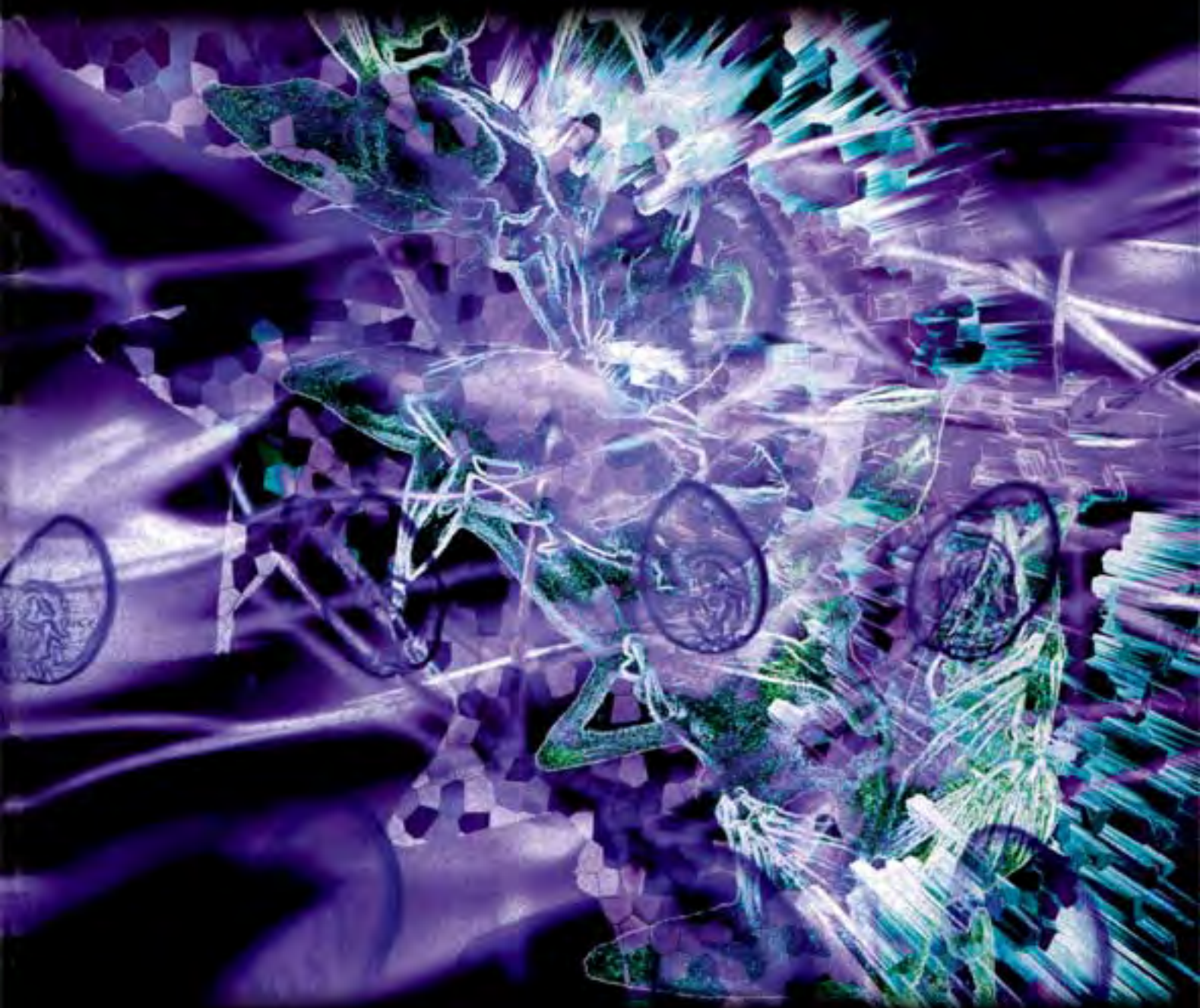


IMPRINT

AUTUMN 2013

VOLUME 48

NUMBER 1



NEW TECHNOLOGIES AND ALTERNATIVE MEDIA

THE QUARTERLY JOURNAL OF THE ARNT-CROWELL FOUNDATION
printmaking + works on paper + digital art + artists' books



Eleanor Gates-Stuart, *Magical Fusion*, 2012, inkjet on paper, 60 x 90 cm.

STELLARSCOPE

the Centenary of Canberra's Science Art Commission

by Clive Barstow and Eleanor Gates-Stuart

Clive Barstow is a practising artist and writer, Professor of Creative Arts at Edith Cowan University Perth and Honorary Professor of Art at the University of Shanghai for Science and Technology, China.

Eleanor Gates-Stuart is a practising artist, Honorary Research Professor at UCSC, and Science Art Fellow at CSIRO. Eleanor is undertaking a PhD at the Australian National Centre for the Public Awareness of Science, Australian National University.

To contextualise this important Centenary of Canberra¹ commission as a significant creative shift for artist Eleanor Gates-Stuart, we must backtrack to a body of prints called *Finger Codes*², produced as part of her artist residency at the University of California Santa Cruz in 2010. In *Finger Codes*, perhaps inadvertently, Eleanor started to develop a personal language based on computer codes and structures that celebrated the operation of mediated systems. Fusing traditional tactile print processes with digital print production, she questioned personal and collective identities through her physical and cerebral responses to the work.

Eleanor's success in gaining the 2013 Centenary of Canberra's Science Art Commission was timely; it has allowed her to collaborate at the highest technical level with scientists and technicians at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Canberra to expand this language within the domain of public art. Based on a story of wheat innovation involving genetics, bioinformatics and historical artifacts, *StellrScope*³ is an emerging body of work connecting the Canberra region to Australia's major crop science, from the times of William Farrer's pioneering wheat breeding through to the scientific achievements of the modern era.

Although aware of the pitfalls of didactic representation, Eleanor has skillfully established her artistic independence throughout a journey of learning that fluctuates between art and science. Perhaps more importantly, she is testing how her ideas can be communicated in a visual form that stimulates even the most unimaginative mind, and how this might transcend both art and scientific language. Through her adoption of new digital and projection technologies that are still in their developmental stage, Eleanor is attempting to position her work in-between knowledge and enquiry. Enlightenment can take many forms; the commission therefore seeks to invest in a collaboration that acknowledges both common and unrelated creative and scientific solutions.

Since her time as a printmaking postgraduate student at the University of the Arts London, the aesthetics of dynamic relationships between objects and artefacts has been a recurring theme in her work. Eleanor's practice as an artist and her command of fundamental skills such as drawing, colour, composition and structure, have been developed through an understanding of the sequential nature of printmaking and the discipline that this requires. These skills are now being translated into a new guise; one that demands an extended spatial awareness for both artist and audience.

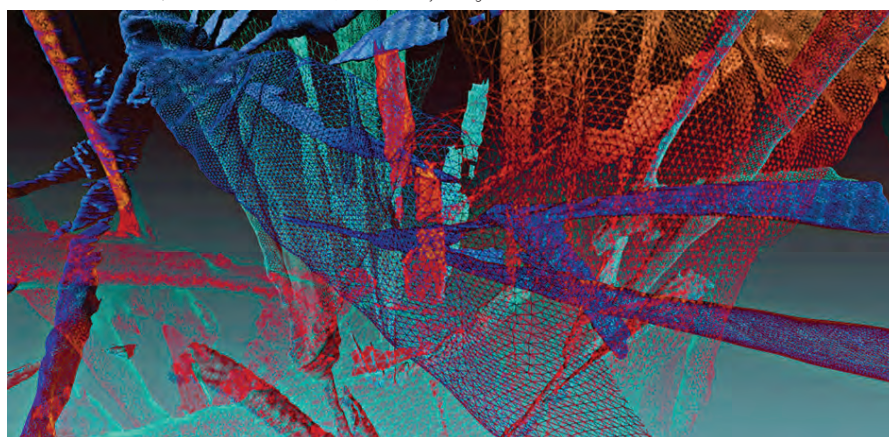
Through the opportunities brought about by CSIRO, this practice has expanded to include digital printmaking aligned to 3D image building and architectural projection. Although the connections between traditional and digital printmaking are easy to map, embracing the digital challenge of 3D and 4D visual space demands a more scientific approach. As such, the artist's position in terms of controlling and owning the work, and the aesthetics that underpin it, are being examined and generously laid bare for us all to see.

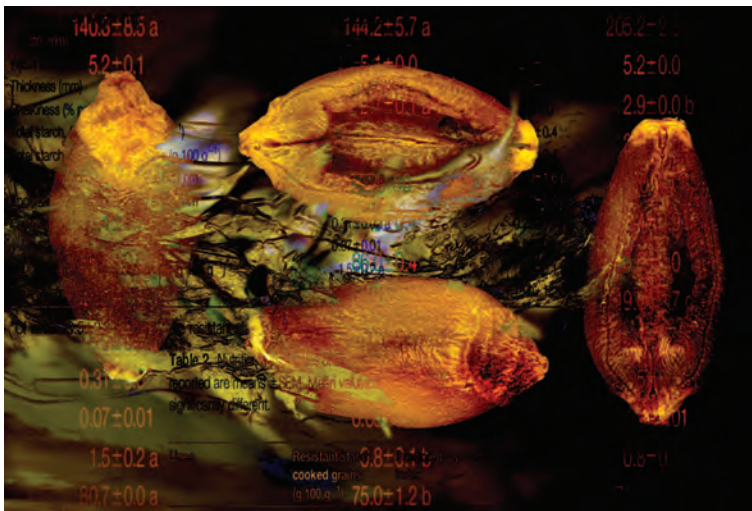
The work *MAGiCal B⁴* (2012 – on this issue of *IMPRINT*'s cover) was probably a turning

point in forming new graphical solutions to represent scientific and historical narratives, particularly when faced with data-based information and a multitude of images as a result of her documentary approach. Visually dense in content and layers, *MAGiCal B* examines the genetics of wheat and the laboratory conditions of retaining dormancy in seed growth. It led to a series of works in the *MAGiCal*⁵ series in which the artist explored spatial dimensions and the number sequence 1 – 9 as the simple numerical rule for mapping shape. With access to high-end technology and the supporting expertise of scientists at the cutting edge of visualisation research, Eleanor has been able to translate and code numerical and data-driven information into a visual form. Working in collaboration with Dr Chuong Nguyen⁶ within the field of 3D reconstruction of plants, insects and microscopic specimens at CSIRO, the artist has been able to design personalised creative tools for visualisation via 3D scanning and manipulation. *The Measure of Volume* and the *Wheatear* series for instance, are images created via volumetric data and 3D scanning.

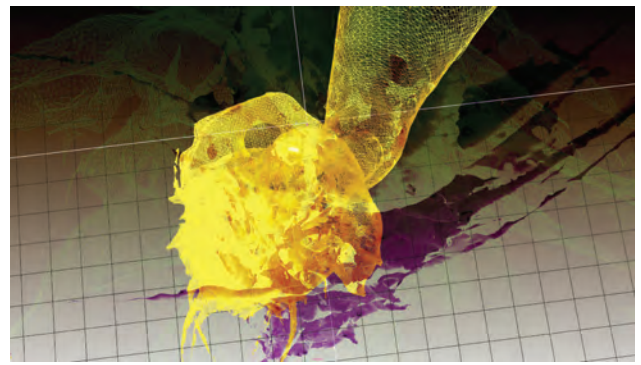
Eleanor manipulates data in the creation and deconstruction of 3D objects towards the making of a print or moving image, starting from rendered files, point clouds,

Eleanor Gates-Stuart, *The Measure of Volume*, 2012, 3D Maya image.

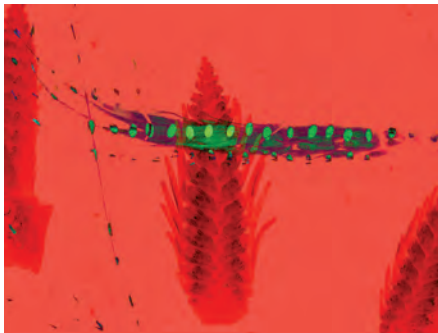




Eleanor Gates-Stuart, *Grains*, 2012, inkjet on paper, 60 x 91 cm.



above Eleanor Gates-Stuart, *Wheatear 3*, 2012, 3D Maya image.



Eleanor Gates-Stuart, *Hot Seeds*, 2012, inkjet on paper, 47 x 60 cm.

scans and screenshots using software such as MeshLab, Maya, and Photoshop. The technology assists in the formation of visual content and production, but it is the synergy between artist and scientist that really drives the formation of new languages communicating both science and art, and at best the fusion of the two. Works, such as *Hot Seeds* and *Grains* utilise an electron microscope to generate the information detail for prints, however, the purpose is often twofold in that it supplies base information for the process, but at the same time presents a technical challenge when working between a three-dimensional and four-dimensional digital space. The opportunity to test out 3D scanning of insects at the Australian National Insect Collection, and volumetric data from the Australian Plant Phenomics Facility was the catalyst for Eleanor's *Bugs* and *Grassland* series, both to be remodelled and transformed as architectural projections for Canberra's *Enlighten 2013*⁷ public art event.

From a thematic position and through their sourcing of scientific data surrounding insects and plants, these works propagate and support our assumptions about the Darwinian theory of evolution. Interestingly though, the ambient and ephemeral quality of their resulting 3D and projection technologies propose a more temporary line of enquiry, one that might place doubt on

our fundamental belief systems that rely so heavily on acceptance of scientific evidence and the permanency of knowledge. The work also pays homage indirectly to the botanical copperplate engravings of Joseph Banks and Daniel Solander, more commonly known as Banks' *Florilegium*. These prints play an important part in our colonial history, standing as a marker of both artistic and scientific process. As with Banks, Eleanor is of course using the microscopic technology of the day and perhaps tomorrow, and through this is proposing as much about our future as our past.

The commission is ambitious for both the Centenary of Canberra and for the artist herself. Her approach is experimental and unrestricted, the technology is cutting edge, and the response will be unpredictable. In this sense it is a true artistic and scientific process, an open-ended investigation of both discovery and enlightenment in which unpredictability can be shared and celebrated. If the resulting works are to be successful, they will have to cross many divides between art and science, between artist and public and between ideas and technology. The true marker of the work is that it can communicate complex issues with simplicity, and first and foremost, that it speaks for the artist herself. •

References

- [illegible]



Eleanor Gates-Stuart, *Bugs*, 2012, 3D Maya image.

100
CANBERRA

CELEBRATING CANBERRA'S CENTENARY
1913 • 2013

The Centenary Science Art Commission is jointly funded by the ACT Government and the Australian Government and is one of many projects marking the Centenary of Canberra in 2013. *StellarScope* will be completed in 2013 and displayed at Questacon and the CSIRO Discovery Centre in Canberra.

The Science Art Commission residency is kindly supported by the Transformational Biology Capability Platform (TBCP) at the CSIRO Mathematics, Informatics and Statistics (CMIS) Research Division and the CSIRO Food Futures Flagship. www.csiro.au

Imprint

THE JOURNAL OF THE PRINT COUNCIL OF AUSTRALIA INC.

Published quarterly by the PCA Inc

Office G21, Fitzroy Town Hall,
201 Napier Street, Fitzroy Vic 3065
Postal address: PO Box 2949, Fitzroy Vic 3065
Telephone: 03 9416 0150 Facsimile: 03 9416 0151
Memberships email: memberships@printcouncil.org.au
Website: www.printcouncil.org.au

The Print Council of Australia is a membership funded visual arts organisation devoted to encouraging the appreciation of contemporary Australian printmaking — printmaking + works on paper + digital art + artists' books.

| | |
|-----------------|-----------------|
| President | Akky van Ogtrop |
| Vice-President | Donna Foley |
| Treasurer | Robert Heather |
| General Manager | Rachel Hancock |

ISSN 0313-3907
ABN 52 199 195 151

contributions

Any information or short news items on printmaking and related arts are welcome. Letters to the editor and articles submitted will be printed at the editor's discretion. All text should be on disc or sent via email. Contributions are submitted at the contributor's risk. IMPRINT cannot be held responsible for loss of manuscripts, discs or photos. For details telephone PCA 03 9416 0150, email imprinteditor@printcouncil.org.au

be on time

The next deadline for advertising bookings and short news items will be Friday 19 April 2013. The Winter 2013 calendar will cover the period from mid June to mid September 2013. Ideas for articles should be discussed with the editor in advance (alternative deadlines apply).

The opinions expressed in IMPRINT are those of the individual contributors and do not necessarily reflect the opinions of the publisher. No part of this journal can be reproduced without written permission of the publisher.

published

March, June, September and December

advertising rates

Pre-booking is essential. For details of our attractive advertising rates, telephone 03 9416 0150. Email: imprintadvertising@printcouncil.org.au or refer to website: www.printcouncil.org.au

cover

Eleanor Gates-Stuart

MAGICAL B, 2012
inkjet on paper, 90 x 60 cm

Eleanor Gates-Stuart is a CSIRO Science Art Fellow. MAGICAL B was created for StellarScope: the Centenary of Canberra's Science Art Commission — www.stellarscope.com. The image is a reference to CSIRO Multi-parent Advanced Generation Inter-Cross (MAGIC) research into the identification of genes in the parenting of plants.

donations

The following members are acknowledged for their generous donations during December, January and February:

NSW: Christina Cordero, Masdi Einfeld, Olwen Evans
Wilson QLD: John Doyle, Jenny Sanzaro-Nishimura
TAS: Jay Phillips VIC: Suzanne Barros, Zoe Geyer, Kari Henriksen, John McClumpha.

| | |
|---------------------|-----------------------------|
| Editor | Sue Forster |
| Proofing assistance | Rachel Hancock |
| | Georgia Thorpe |
| Advertising Manager | Georgia Thorpe |
| Design | Kerry Aker |
| | Desktop Skills |
| Printer | Kosdown Printing Co Pty Ltd |

While every care has been taken to trace and acknowledge copyright, the publishers tender their apologies for accidental infringement where copyright has proved untraceable. To the best of our knowledge all information is correct at the time of publication.

in this issue

pca

05 PCA General Manager's report by Rachel Hancock

exhibition and book p/reviews

06 Brian Robinson's men + GDS exhibition and catalogue, reviewed by Katrina Chapman
40 Jessie Trill: etching her own path by Rebecca Edwards
42 Beauty, colour and innovation: new Japanese print exhibitions and books, p/reviewed by Sue Forster

international reports and news

08 Locust Jones: a printmaking residency in Johannesburg by Vicky Browne and Locust Jones
10 Prawat Lauchaoen's Temporary Residency series by Anne Kirker and Jan Davis
12 Pressing Prints/Pressing Palms: the 2012 Mid America Print Council conference, report by Ben Rak
13 COFA printmaking extensions in China, report by Angela Butler
14 Fondazione Il Bisonte, Florence, report by Megan Hunter
15 Estonian Printing Museum: a hot bed of new ideas for old printing crafts, report by Robyn Smith

artists' books

16 Brute force, unbroken spirit: the work of Gwen Harrison and Sue Anderson by Manica Oppen
18 Mountains Brown Press: the recent artist's books of Phil Day by Ges Cowley

new technologies and alternative media

20 New technologies and alternative media: the expanded field of printmaking, introduced by Sue Forster
22 Stewart Russell - Spacecraft: artist, printer, curator, designer by Georgia Thorpe
24 An introduction to 3D printing by Jenna Downing
26 Adelaide's fabulous Fab Lab: a new creative hub for artists by Karen Marsh
27 Only for commerce? The new wide-format digital printers and high-speed laser cutters by Sue Forster
28 The Australian National University's Inkjet Research Facility by Martyn Jolly
30 StellarScope: the Centenary of Canberra's Science Art Commission by Clive Barstow and Eleanor-Gates Stuart
32 Paul Coldwell: between the dots by David Waterworth
34 Femimesis: lenticular prints by Felicity Why
36 Exploring new landscapes on cloth using the MSDS technique by Marie-Therese Wisniewski
37 Biological memory in the 'prints' of Binh Danh by Sue Forster
38 Art3's Swerve: a deviation into new processes by Deborah Malor
39 Improvised plates and 'collagraphic etching' by Antonio Muratore

news

44 Australia in Print



Print Council
of Australia
Inc.

The Print Council of Australia Inc.
proudly invites you to join us for

Objects and Journeys an illustrated talk by

Paul Coldwell

Professor in Fine Art, University of the Arts, London

6pm on Friday 19 April 2013
in the Reading Room, Fitzroy Town Hall
201 Napier Street, Fitzroy, Victoria

Professor Paul Coldwell is internationally recognised for his prints, book works, sculptures and installations. He was a keynote speaker in Australia at the 2011 Impact7 International Multidisciplinary Printmaking Conference and has represented the UK in numerous European print biennials. His work is held in prestigious public collections at the Tate, Victoria & Albert Museum (V&A), the British Museum and the Arts Council of England.

His illustrated talk, 'Objects and Journeys', will look at the relationship between printmaking and sculpture in his own art practice, and at his use of objects to construct images of vulnerability and uncertainty. In particular, it will discuss his current survey exhibition: *A Layered Practice - Paul Coldwell Graphic Works 1993-2012*, its themes of journeying, absence and loss and his engagement with old and new print technologies.

www.paulcoldwell.org
www.printcouncil.org.au

RSVP by 17 April
03 9416 0150
memberships@printcouncil.org.au

Entry by gold
coin donation.
Light refreshments
served.

