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OCTOBER 2020

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[After COVID-19: Creating the Best of Times from the Worst of Times](#)

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Patron of The Royal Society of NSW

Her Excellency The Honourable
Margaret Beazley AC QC
Governor of New South Wales

1287TH OGM AND OPEN LECTURE

Where now for the study of time?

Wednesday, 7 October 2020



Professor Huw Price

Bertrand Russell Professor of Philosophy
University of Cambridge

Date/time: Wednesday 7 October 2020, 6:30 PM

Venue: [Zoom Webinar](#)

Entry: No charge

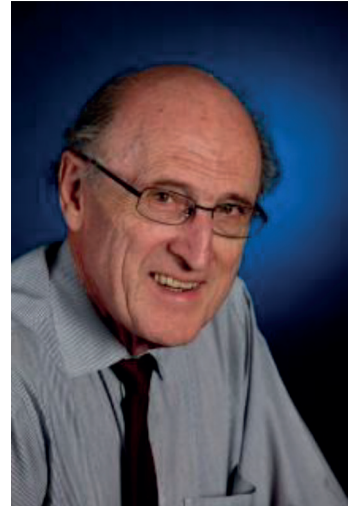
Enquiries: [via email](#)

All are welcome.

See [page 4](#) for more information

From the President

I have been reading “Sapiens”, a thought-provoking book by Israeli author Yuval Noah Harari. In essence it is a short history of our species, *Homo sapiens*, over the past 2 million years or so. Its advertised selling point is that over the past 100,000 years there have been five other human species on planet Earth, including until quite recently the Neanderthals. There is speculation about the exact fate of the other five, some of it reflecting the dark knowledge we have of the savagery of our own species; but in truth we find out disappointingly little about the interaction between the different human species. (But I remember my delight on reading elsewhere that all modern humans from the European branch of *Homo sapiens* have a few percent of Neanderthal genes.)



The book is an international best seller but has had mixed reviews from experts. For me the most interesting part is the claimed secret behind our species being able to make the transition from a hunter/forager way of life in tribes of not more than a few hundred, to one where there are now in most of the world millions and even billions living close to each other. The secret is the development (following the agricultural revolution) of collectively agreed “myths” that are shared (even if disliked) by thousands or millions. For the author all religions fall into the category of myths, but so too does the acceptance of slavery, notions such as *All men are created equal*, and beliefs such as that money has value and that corporations have reality.

While I can agree with much of this, I find myself wanting to express matters differently: that while very many of the things that shape our experience are indeed inventions or creations of our species, not all such creations are equal. Some are very good and make life agreeable, some very bad, and others somewhere in the middle. On the good side of the ledger my personal list would include, in no particular order: music; literature and storytelling; art; mathematics (I am one of those who believes that mathematics is created, not discovered!); science as a way of understanding the natural world and improving human well-being; history as a way of discovering the true story of the past; respect for the planet on which we live; the notion that all men and women are of equal value; that children should be protected and considered loveable; that democracy is to be prized; that diplomacy is better than force; and so on.

On the other side, human inventions that are to me deplorable include: the divine right of kings and priests; racial purity; slavery; the notion of male superiority; the belief that might is right, or that some castes/classes/races/religions are inferior; and so on. My full list is much longer.

(To be provocative, religion surely falls on both sides of the ledger: at its best it might be one of the finest creations, but at its worst it has operated as a bulwark of oppression: think of sacrificial virgins — I’m sure we can all think of many other examples.)

From the President (continued)

Within the Royal Society of New South Wales, I know there will be substantial agreement with my lists, both positive and negative. Nevertheless, these assessments are not platitudes, since very different myths prevail in other communities and other places, and even more so, have prevailed in other times, even as recently as the last century.

And in our own time, how about the almost universal idea that *Homo sapiens* has and deserves a special status compared to all other species on our planet? There's a myth worthy of debate!

Ian H Sloan AO FRSN FAA
President, Royal Society of NSW

Meet the Council

This is the first in a series of articles giving members a greater insight into the Society's Council. Professor George Willis is the new Hunter Branch representative on Council replacing Scientia Professor Emerita Eugenie Lumbers.

Professor George Willis was born in 1954 in Adelaide and lived there for the next 23 years. Growing up, he enjoyed bushwalking, fishing, science, reading and learning, and he was inspired by the Apollo program. His studies led to a BSc (Hons) from the University of Adelaide, received in 1977, and then to research in mathematics at the University of Newcastle upon Tyne, for which he was awarded a PhD in 1981. Following postdoctoral positions at universities in Australia, Canada and the United Kingdom, he moved to Newcastle, Australia, in 1992 to be a lecturer in mathematics. He married Catherine in 1979 and they have one daughter.



George finds it enormously satisfying that — by using logic and imagination in powerful, and often beautiful and unexpected ways — mathematics extends our brains' natural capabilities to new domains. His work uses algebraic methods in combination with precise formulations of intuition about space, symmetry, randomness, approximation and continuity. He has discovered fundamental structure in, and produced new insights about, (potentially) infinite networks, of which family trees and data structures are examples.

Currently an ARC Laureate Professor at the University of Newcastle, George is extending his exploration of network symmetry with a team of students and postdoctoral fellows. He continues to enjoy learning and now, in addition to learning from his own experience, he sees the world through the eyes of his grandsons as well.

1287th OGM and Open Lecture

Where now for the study of time?

Professor Huw Price

Bertrand Russell Professor of Philosophy
University of Cambridge

Date: Wednesday 7 October 2020, 6:30 PM

Venue: [Zoom Webinar](#) ([Obtain help in getting started with Zoom](#))

Entry: No charge

Enquiries: [via email](#)



All are welcome.

The scientific world has just marked the centenary of Sir Arthur Eddington's confirmation of Einstein's prediction of the bending of light by gravity. This work, based on observations during a solar eclipse in 1919, made Eddington a household name. He became one of the great science communicators of his generation. When he died in 1944, TIME magazine said that the world had lost 'one of mankind's most reassuring cosmic thinkers'.

One of Eddington's favourite cosmic subjects was Time's Arrow, a term he himself introduced to the literature in his 1927 book, *The Nature of the Physical World*. Eddington thought that there is something essential about time that physics is liable to neglect: the fact that it 'goes on', as he often puts it.

Despite the best efforts of philosophers to pour cold water on this idea, similar claims are still made today, in physics as well as in philosophy. In the lecture that begins this presentation, Huw Price argues all sides in these debates can profit by going back to Eddington. Eddington appreciates some of the pitfalls of these claims with greater clarity than their contemporary proponents, and also issues a challenge to rival views that deserves to be better known.

For this evening's event, **Huw Price** is joined by two current co-Directors of the Centre for Time, **Kristie Miller** and **Alex Holcombe**, to ask: *Where now for the study of time?*

Professor Huw Price is Bertrand Russell Professor of Philosophy and a Fellow of Trinity College at the University of Cambridge. He is Academic Director of the Leverhulme Centre for the Future of Intelligence, and was co-founder with Martin Rees and Jaan Tallinn of the Centre for the Study of Existential Risk. In 2019 he joined the inaugural Board of the Ada Lovelace Institute, and became the UK Director of the new China-UK Research Centre for AI Ethics and Governance. Before moving to Cambridge in 2011 he was ARC Federation Fellow and Challis Professor of Philosophy at the University of Sydney, where he was founding Director of the Centre for Time. He is a Fellow of the British Academy, a Fellow and former Member of Council of the Australian Academy of the Humanities, and a Past President of the Australasian Association of Philosophy.

2020 Annual RSNSW + Four Academies Forum

After COVID-19: Creating the Best of Times from the Worst of Times

05 November 2020, Government House Sydney

This year's Forum will examine the profound disruptions wrought by the COVID-19 pandemic and how we can and should redefine our future. **Dr Peter Hobbins**, Principal Historian, Artefact Heritage Services, will present the keynote address on the subject of 'Immunity from History: what we can learn from collective responses to crises'.

Distinguished Professor at the Australian National University, Director of the 3A Institute, and Senior Fellow at Intel, **Genevieve Bell AO**, and **Dr Jordan Nguyen**, Founder CEO Psykinetic, will address the subject of forging a resilient future for Australia's youth.

Dr Teresa Anderson AM, Chief Executive Sydney Local Health District, and **Scientia Professor Gregory Dore**, Kirby Institute, UNSW Sydney, will explore the sweeping changes to the healthcare system brought about by the pandemic in the short and long term.

Professor Larissa Behrendt AO, Distinguished Professor, UTS, and **Bethwyn Serow**, Executive Director, Australian Major Performing Arts Group, will speak about the central role that culture and creativity play in our daily lives, and the in health of the creative industries themselves. **Dr Martin Parkinson AC PSM**, Chancellor of Macquarie University, **Professor Julianne Schultz AM**, Professor of Media and Culture, Publisher of *Griffith Review* and Chair of The Conversation Media Group, and **Professor Anne Tiernan**, Professor and Dean (Engagement), Griffith University Business School, will form a Panel to explore whether the COVID moment is a time for reforming Australia's public sector institutions to realise a better normal for our citizens.

The conversations on the day will be facilitated by our Moderator and Rapporteur, **Professor Eric Knight**, Executive Dean and Professor of Strategic Management, Macquarie Business School.

Given that the audience in Government House will be very limited because of physical distancing requirements, the entire day's proceedings will be live streamed. This does have the advantage that the Forum can reach a much wider audience than usual. The Society will be distributing invitations to participate virtually to all Society and Academy members very soon.

Dr Susan M Pond AM FRSN FTSE FAHMS
Chair, Forum Program Committee
Vice-President, Royal Society of NSW



Upcoming event: Southern Highlands Branch

Literary England: Susannah's Top Ten Places

Susannah Fullerton OAM FRSN

Literary Lecturer and President

Jane Austen Society of Australia

Date: 15 October 2020

Venue: <https://susannahfullerton.com.au/literary-england-talk/>
(password located in event notice sent to Society members)



In her memoir *84 Charing Cross Road*, American Helene Hanff goes searching for the 'England of English Literature'. I know just how she felt. I first went to England in 1980, with a long list of literary places I just had to see — I longed to visit the homes of favourite novelists and poets, walk the paths they had trodden, pay my respects at their graves, and see with my own eyes the landscapes that had filled my imagination since I had learned to read.

England is so rich in literary connections that it was terribly hard choosing only ten places for this talk. I have tried to include variety — of authors, of sites and of geographical area. There's a library, houses large and small, churches, a graveyard and an ancient charitable institution. I will take you from the gentle countryside of southern England, up to more dramatic northern landscapes.



I hope that this virtual travel will enchant and intrigue you, will give you ideas of places to include in your next visit to England, or bring back wonderful memories. I have not included literary places in London — that has to be a separate talk.

What I hope this talk will make you do is to consider which Top Ten places you would choose, and to consider with a deeper appreciation the incredible riches of the England of English Literature.

Susannah Fullerton has been the President of the Jane Austen Society of Australia for more than twenty years. She has written several books about Jane Austen and has lectured about her favourite novelist around Australia and overseas. She received an OAM for services to literature and is a Fellow of the Royal Society of NSW. Susannah is also the Patron of the Kipling Society of Australia. She leads literary tours to the UK, Europe, NZ and the USA, and she sends out a popular and free monthly blog, 'Notes from a Book Addict' which you can sign up for on her website. Susannah is one of ADFAS's most popular Australia lecturers and she offers a wide range of talks about famous writers and their works.

Upcoming event: Hunter Branch

The Engaged University: Advancing Research and Innovation through Powerful Partnerships

Professor Janet Nelson

*Deputy Vice-Chancellor, Research and Innovation
University of Newcastle*



Date: 27 October 2020, 5:15 PM

Venue: Zoom webinar (TBA via website)

This event is presented jointly with the University of Newcastle as part of its Looking Ahead series.

In today's society, we face unprecedented change and complex global challenges. This means we need to think and work differently, and our agility, responsiveness, and collaborative experimentation as a society will be critical to sustainability and success — not only for university and our regional economies, but for our wider communities.

Join Professor Janet Nelson as she examines how researchers collaborate with community partners to leverage the unique history of our region — and increase our research and academic excellence — to solve some of our most wicked problems.

Janet and her panel of experts will discuss some of the current opportunities and challenges our researchers are facing and seeking to solve: how do we bring the world closer to a sustainable future? How do we support transition and uptake of natural resources in the development of new energy technologies?

The University of Newcastle is looking ahead and focusing on the solutions we need to build for our regions. We are empowered by our reputation for outstanding research and collaboration, underpinned by our values of excellence, equity, sustainability and engagement in everything we do. With our fellow citizens we can navigate through this unique time. The University of Newcastle is dedicated to our partnerships with regions as we thrive into our shared future.

Professor Janet Nelson joined the University of Newcastle in March 2020. In her role, she serves as the university's chief research officer with responsibilities for the diverse and comprehensive research enterprise. She will draw on her extensive experience in scientific research, business development and research administration to further enhance the university's reputation for research excellence, engagement and impact. Professor Nelson has more than 30 years of experience in scientific research, scientific review, research portfolio administration, complex and multidisciplinary program and project management, business development, and science policy implementation.

Report: Events Committee

by Christina Slade (Chair of Events) & Lindsay Botten (Webmaster)

Despite the ongoing challenges imposed by the COVID-19 pandemic, the Events Committee continues to plan and execute events, albeit in the on-line environment. A number of successful events were held in August, including Professor Peter Radoll's lecture on *Growing Tall Black Poppies* [181 views as of 1 October], Science Week presentations by Professors Brynn Hibbert *The Periodic Table* [118 views as of 1 October] and Robert Clancy *The COVID Curve in Context* [195 views as of 1 October]. The recordings of these events are available on the Society website and on YouTube and continue to attract interest.

Unfortunately, Robert Clancy's much anticipated Maps in Manly tour event titled *Charting a course: a 500-year story of discovery and development of Sydney* at the Manly Art Gallery and Museum could not be made generally available, but the President was able to attend and there will be a Royal Society of NSW tour on **14 October**. (See [page 9](#) for details.)

Professor John Rasko's well received lecture *The Dawn of Molecular Medicine — Gene Therapy: past, present and future* [84 views as of 1 October] was held on 2 September, as part of the 1286th OGM, with strong support from President Ian Sloan doing the Introductions, Susan Pond chairing the Q&A, and Judith Wheeldon doing the Vote of Thanks.

On Thursday 17 September the Southern Highlands Branch presented Professor Sandra Lynch, Institute for Ethics and Society, University of Notre Dame Australia, speaking on *Philosophical Ethics and Schools: Plan and Paradox*. This event is now available on the Society's website and on our YouTube channel.

Moving into October and beyond, a number of events are planned.

On **Wednesday 7 October** at 6:30 PM, as part of the 1287th OGM, Professor Huw Price from Cambridge University will present his lecture on *Time's Arrow*. This will be followed by a panel discussion with two academics from the Centre for Time at Sydney University, Dean Rickles and Kristie Miller.

On **Wednesday 11 November** as part of the 1288th OGM, Professors Adrian Lee and Tom Borody will be in discussion with Emeritus Professor Robert Clancy on the topic of *How Good is NSW — the role of Helicobacter pylori in Peptic Ulcer Disease*.

On **Wednesday 2 December**, Professor Tony Capon from Monash University will address the Hunter Branch on the topic *Planetary Health: Safeguarding Health in the Anthropocene Epoch*.

On **Wednesday 9 December**, as part of the 1289th OGM, Professor Matthew England of UNSW Sydney — the 2019 winner of the James Cook Medal — will address the Society on a topic to be announced. At this OGM, the winners of the 2020 Royal Society of NSW Awards will be announced.

Current details of all events can be found on the [Society website](#), with events available on our [YouTube Channel](#). It would be worthwhile following the Society on [Facebook](#).

Exhibition of early maps of Sydney

The Clancy Collection — an exhibition of early maps

Emeritus Professor Robert Clancy AM FRSN

Royal Society of NSW

Date: 14 October 2020, 4:00–5:30 PM

Venue: Manly Art Gallery and Museum, Manly NSW 2095



Entry: There is a limit of 20 attendees on each occasion due to COVID-19 related entry restrictions. Register by email with the [RSNSW Events Committee](#) to ensure your place. Wine and cheese will be available at a cost of \$10 per person, to be collected at the door.

Enquiries: By email to the [RSNSW Events Committee](#)

All are welcome.

[The Clancy Collection](#) is one of Australia's most significant archives of maps, ranging from 15th century European maps to an extensive collection depicting Australia and the Pacific. In this exhibition of around 100 maps, Sydney is the focus of a 500-year story of European expansion, scientific discovery and navigational endeavour.

Professor Clancy will guide attendees through an exhibition of maps that trace the discovery of Terra Australis and the development of Sydney using contemporary maps as documents of history. It is also the story of the printed map from 1480 to 1950. Maps compare the world as seen through western eyes before and after the great ocean traverses by those seeking the source of nutmeg and cloves. From their bases on the north coast of Java, expeditions led to discovery of Australia and the western two-thirds of the continent. The French and the English stole the 18th century, with James Cook tracing the east coast, to complete a rough circumference, before the English established a Jail at Sydney Cove for 1000 souls. The remaining exhibition explores the changing relationship between Sydney and its hinterland, and population shifts that take place as Sydney takes an international stage. Land becomes a common denominator as early grants give way to suburbs, and squatters give way to farmers. Sub-stories include navigation, charts, transport and always, land issues.



1866 Royal Charter publication

In 1968, the Society published a volume celebrating the centenary of the Royal Charter in 1866: [‘A Century of Scientific Progress: The centenary volume of the Royal Society of New South Wales — a history of several aspects of Australian scientific development, with particular reference to New South Wales.’](#) This is now available on-line.

Appointment of Distinguished Fellow to CSIRO Board

Quantum physicist, former Australian of the Year in 2018, and [Distinguished Fellow of the Royal Society of NSW](#), Scientia Professor Michelle Simmons of UNSW Sydney, has been appointed to the Board of CSIRO for a five-year term. Professor Simmons, who is Director of the ARC Centre of Excellence for Quantum Computation and Communication Technology and an Australian Research Council Laureate Fellow, joins the board at a critical time for the science agency, being brought on board the national science agency to help steer the organisation in the COVID response and economic recovery.



In commenting on her appointment, Professor Simmons said that ‘Australia’s future will be underpinned by the quality of our science and our capacity to nurture science-based industries. CSIRO plays a pivotal role in these respects’.

Postponement of Ideas@theHouse

Regrettably, due to unforeseen circumstances, it has been necessary to postpone the second in the **Ideas@theHouse** series to be presented jointly by Our Patron, Her Excellency, The Honourable Margaret Beazley AC QC, Governor of NSW and the Royal Society of NSW on the evening of 22 September 2020.

As soon as circumstances permit, the event will be rescheduled and members and friends of the Society will be notified by email and this website.

Point Counterpoint: new Journal section

The Society is pleased to introduce *Point Counterpoint*, a new section in its [Journal and Proceedings](#) through which scientific debate and disagreement on topics of broad societal interest can be aired and documented.

The first in this series, comprising five pieces, deals with the role of [Gas as a Transition Fuel](#) in Australia’s and the world’s energy systems.

We hope that you will derive benefit from reading *Point Counterpoint*.

Council and Office-Bearers 2020/2021

The current Council and office-bearers of the Society are:

Patron	Her Excellency The Honourable Margaret Beazley AC QC, Governor of New South Wales
President	Emeritus Professor Ian Sloan AO FRSN
Vice-Presidents	Emeritus Professor Brynn Hibbert AM FRSN (immediate past President) Dr Susan Pond AM FRSN Ms Judith Wheeldon AM FRSN
Hon. General Secretary	Mr Bruce Ramage MRSN
Hon. Editorial Secretary	Emeritus Professor Robert Marks FRSN
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Hunter Branch Representative	Professor George Willis FRSN FAA
Hon. Secretary, Southern Highlands Branch	Ms Anne Wood FRSN

Editor: [Jason Antony](#)

