



Gender, Science and Wonder

Postgraduate workshop sponsored by the ANU Gender Institute
11-12 February 2016

The 'Gender, Science and Wonder' postgraduate workshop was an interdisciplinary conversation of postgraduate students, early- to mid-career researchers, and established and renowned scholars from across the humanities, social sciences and sciences. Day 1 was launched, fortuitously, on the first UN International Day for Women in Science, 11th February. Over two days, the workshop delved into diverse perspectives on gender and science: institutional experiences of gender inequalities in science and technology fields; the marginalisation of certain forms of knowledge; the sciences that understand and remake gender; and the gendered traces and threads that shape scientific knowledge-making. The theme of wonder invited novel approaches on the nexus of gender and science, moving beyond demographic analyses of STEM workforces and traditional feminist critiques of science and into questioning how we can adopt a gender lens to develop innovative points of articulation between sciences, social sciences and humanities.



Dr Astrida Neimanis 'Fishy Beginnings'

Approximately sixty people attended sessions over the two days, exceeding our expectations as organisers. Many attended one or two sessions, focusing on areas of interest across the diverse topics on offer. A core of approximately 20 stayed for much of the two days, and engaged in a rich conversation that bridged the themes of the workshop.

Two of our invited keynote speakers, Professor Catherine Waldby (ANU) and Dr Astrida Neimanis (University of Sydney), bookended the first day, addressing themes of human biology, how we imagine ourselves and the interplay of deep time, present time and imaginable futures expressed through scientific stories of our watery bodies and porous boundaries. Catherine Waldby's opening keynote presentation addressed the interlaced embodied temporalities at stake in reproductive theories of oocytes. Astrida Neimanis at the evening public lecture spoke of watery bodies, the affinity of humans with oceanic desires, and the implications that re-imagining our watery bodies might hold for environmental futures. Respondent to Dr Neimanis, Professor Margaret Jolly, spoke about our human relationships with the ocean and the challenges that thinking in deep geological time present for humanities and social sciences approaches to climate change.



Professor Margaret Jolly delivers respondent reflections on deep time, climate change and perspectives from the Pacific Ocean

A ‘Science, wonder and equity’ panel opened up questions of gender equity in STEMM disciplines, anticipating themes examined in depth on Day 2. Invited speakers from chemistry, engineering and science communication spoke of their own experiences in pursuing careers in STEMM and their involvement in programs designed to increase the participation of women and girls. Several addressed the intersections of gender with ethnicity, migration status and rural disadvantage. Themes included the value of diverse role models; the importance of promoting alternative conceptions of science and technology against masculine stereotypes; and the role that revaluing science and technology for their practical and social contributions can play in encouraging more women and girls to become involved in science and technology.



Sam Cheah speaking in ‘Science, Wonder and Equity’ Panel



Dr Trang Ta shares the wonder of bodily decomposition

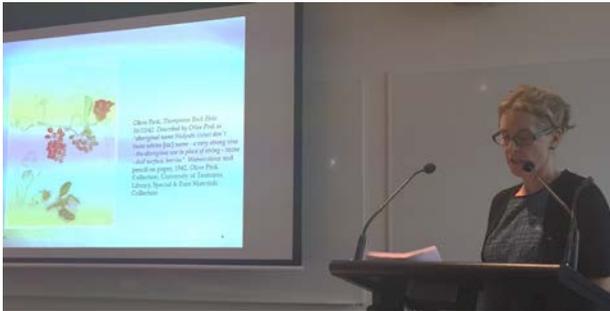
Afternoon sessions presented by students and early to mid career researchers delved into fleshy science and the making of gendered bodies. Papers covered the state-sponsored science of transgender research in post-independence Indonesia; intersections of art and science in exploring decomposition of bodies in the Sydney body farm; how neuroscience and cultural understandings might be brought into productive conversation to explore an anthropologist’s embodied experiences of witchcraft in the Trobriand Islands; and the numerological science of a Solomon Islands revival movement. Each of these papers in their own way explored how gendered social relations are implicated both in science and in the making of embodied relations.

Day 2 opened with the final keynote, by Dr Anne-Sophie Dielen. Dr Dielen told stories from her research project the League of Remarkable Women in Science, highlighting ‘the good, the bad and the wonder’ for women working in science, technology, engineering, mathematics and medicine. Dr Dielen illustrated the experiences of women tracing career paths in STEMM through inspiring and moving examples, noting that experiences of both inspiration and discrimination were ubiquitous among the women she has interviewed. These stories exposed the thick relationships between the wonder of scientific research and the lived experiences of forging a science career in the face of overt and covert forms of pressure and disadvantage faced by women in STEMM.



Dr Anne-Sophie Dielen on wonder and bias in science

These themes underpinned the remainder of the presented sessions, in which speakers explored the gendering of scientific knowledge, traversing disciplines of archaeology, botany and astronomy, alongside Western understandings of science in general. The first paired session explored gendered exclusions from scientific legitimation: the historical emergence in the West of ‘science’



Dr Saskia Beudel uncovers Olive Pink's ecological thought

as a powerful practice of disciplinary exclusion resting on an intertwined marginalisation of both women and people with disabilities; and the combined marginalisation of gender and Aboriginal knowledge in the poor reception given to the botanical anthropology of Olive Pink. The second paired session examined gendered landscapes of knowledge in archaeology and astronomy, respectively, and how gendered assumptions have become fundamentally embedded in scientific

knowledge (and its teaching), and to how such knowledge is derived, recognised and legitimated. These papers picked up on the themes raised in the panel on Day 1 and Dr Dielen's keynote presentation, highlighting how questions of gender equity in STEMM are deeply entangled with the gendering of scientific knowledge itself.

Day 2 concluded with an engaging hands-on experience courtesy of presenters from Robogals, one of the programs showcased in the panel on Day 1. Working in teams, students and researchers, most from non-technical disciplines, competed to program robots to race around an obstacle course. This was followed by a Q&A with Robogals presenter Sam Cheah, which highlighted the value of positive hands-on experience in engaging girls in schools with engineering and technology and debunking masculine stereotypes of engineering and technology.

Many of the presenters at the workshop, including post-graduate students and recent graduates, are now working towards an edited journal special issue.