Unruly Techniques: Linking Knowledge Practices Through Art, Science and Technology

Deakin University, the Office of the Deputy Vice-Chancellor of Research and the Faculty of Arts and Education welcome you to the Deakin University Melbourne City Centre for the Unruly Techniques Symposium:

Friday 14 August 2015, 10.00am - 5.45pm

The ways in which knowledge is acquired and acted upon have become increasingly unruly. That is to say, rules may be adhered to in myriad ways inflected by individual, cultural, historical and geo-political factors.

Cooperation and collaboration are needed to negotiate the rules of knowledge engagement and their application to common concerns regarding technological mediation, institutional structures, embodied engagement, diversity, social justice and the frontiers of the human-non-human collective.

The Unruly Techniques Symposium provides a forum to contextualize and discuss the proposition that while innovation appears at the level of the disciplinary field of research, the production of new knowledge emerges from a complex web of techniques and practices that occur below the threshold of a particular discipline.

The Unruly keynote presenters, panellists and symposium attendees will have the opportunity to examine the current conditions in which collaboration operates and attempts to develop a creative commons.

Program

9.30am Arrival  Morning Tea

10.00am – 10.15am  Welcome: Vice-Chancellor Prof Jane den Hollander
10.15am – 10.30am  Introduction: Jondi Keane
10.30am – 11.15am  Keynote 1: Anna Munster
11.15am – 12.00pm  Keynote 2: Vaughan Prain
12.00pm – 12.30pm  Panel Discussion 1 (see list of panellists)

12.30pm – 1.30pm  Lunch

1.30pm – 1.45pm  Introduction:
Deputy Vice-Chancellor Research Prof Lee Astheimer
1.45pm – 2.30pm  Keynote 3: Christine Wertheim
2.30pm – 3.15pm  Keynote 4: Takashi Ikegami
3.15pm – 3.45pm  Panel Discussion 2 (see list of panellists)

3.45pm – 4.00pm  Afternoon Tea

4.00pm – 4.45pm  Keynote 5: Margaret Wertheim
4.45pm – 5.15pm  Panel Discussion 3 (see list of panellists)
5.15pm – 5.45pm  Plenary Speakers and panellists

6.00pm – 7.00pm  Drinks
**Unruly Aims**

The Unruly Techniques Symposium provides a way to navigate current knowledge practices that operate across disciplines and throughout the public sector. By mapping current interdisciplinary collaborations it becomes possible to devise innovative ways to mobilize practitioner-researchers at Deakin in regional, national and international projects.

The aim of the symposium is to initiate discussion across the university and come away with a collection of practices that best equip researchers to build practical approaches to collaboration that informs our actions in the future.

**Unruly Panels**

The Symposium is structured around the five keynote presentations followed by Q&A sessions and panel discussions that engage with the keynotes’ provocations.

The panels include researchers from across the faculties and research centres at Deakin who will discuss their approaches to, experiences of and concerns around interdisciplinary collaboration.

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<td><strong>PANEL 1:</strong></td>
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<td>Susan Balandin</td>
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<td>Renata Lemos Morais</td>
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**Anna Munster**  
**Keynote Speaker 1**

Anna Munster is a writer, artist and Associate Professor at UNSW Art and Design. She has published widely on networked culture and media arts including two books and collaborates artistically with Michele Barker.

**From technology to techniques: from mediation to ‘immediation’. Or, what working with others and across media can teach us about bodies, experience and technics.**

When we think of collaboration that takes place across practices and knowledge domains enabled by technological platforms, we often subjugate the roles played and the effects generated by the media we deploy. Platforms such as Skype, online project hubs (Trello, Basecamp and so on), or even email should, we hope, smooth our partnerships and hum silently along in the background of the important exchanges and work we set out to do. Yet technologically mediated spaces for collaboration often introduce an unruliness of their own into collaborative process. This unruliness may range from the simple necessity of having to synchronise platforms across multiple time zones to errors in telecommunication to the full presence of noisy signaletic interruptions. For all these reasons, technologies begin to function less as mediations between senders and receivers and more as ‘immediate’ operatives with direct and felt forces and affects for the entire project!

This talk considers the ways in which contemporary media themselves collaborate within collaborative projects and across contexts. It will suggest that a range of emerging aesthetic techniques and art works deliberately take up the unruly contributions of media platforms in ways that open up to the novelty of their disruptiveness. It will propose that by inventing new techniques for such technologies, we can collectively create novel assemblages that allow us to not only collaborate across different knowledge and practice domains but also investigate how the process of collaborating might itself be transformed.

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**Vaughan Prain**  
**Keynote Speaker 2**

Vaughan Prain is Professor and Deputy Dean of Education at Latrobe. He has over 35 years of experience in researching innovative teaching and learning approaches in primary and secondary science. Vaughan has authored two books and publishes extensively on science education.

**Unruly Negotiations: Science/Arts Secondary Classrooms**

There is growing agreement that integrating student learning in science and the arts can have significant mutual benefits. In both areas students are expected to engage broadly and deeply with multi-modal resources, techniques and objects to find and solve familiar and new problems.

Quality learning in both areas entails multiple modes of rational and intuitive thinking, feeling and creative adaptation, where learners are expected to connect or apply their learning to the physical environment and a meaningful sense of place. Scientists and artists regularly collaborate to address socio-scientific problems, and in so doing alter viewers’ cultural, aesthetic and design perspectives, and create new conceptual understandings and experiences.

However, negotiating these potential synergies in secondary classrooms often remains an unruly challenge for teachers.

In this presentation Vaughan Prain will briefly overview a theoretical case for integrating learning in science and the arts, and then indicate some pedagogical principles that can underpin workable practices. There will be some recent examples of enacted secondary curriculum that provide insights into the challenges, enablers and opportunities of engaging in new unruly pathways for quality learning in both subjects.
Christine Wertheim
Keynote Speaker 3

Christine Wertheim is a poet, performer, artist, critic, curator and collaborator and co-director of The Institute For Figuring. Christine teaches at the California Institute of the Arts.

Pata-Critics: The Art and Science of Imaginary Solutions
Inspired by Alfred Jarry’s ‘Pataphysics—the science of exceptions and imaginary solutions’—this presentation discusses a variety of non-standard approaches to knowledge in which science and art come mingle; from Kindergarten, science fiction, Afro-Futurism and the Zapatista space program, to poets who create living organisms with poems as genetic codes, and artists who collaborate with insects to produce new nature-culture hybrids.

Simultaneously we address the question of whether science itself might be pataphysical, by focusing on practices where new forms of representation enable the observation of hitherto unsuspected aspects of objective phenomena. The invention of Cartesian coordinates allowed the emergence of analytic geometry, while new mathematical descriptions of the cosmos predicted black holes, anti-matter and sub-atomic particles, all of which have since been observationally confirmed. Here, discovery and invention emerge as two poles of a larger, more playful synthetic process, rather than opposing, analytic trends; and science shades into art.

Takashi Ikegami
Keynote Speaker 4

Takashi Ikegami is an Associate Professor in the Graduate School of Interdisciplinary Information Studies at University of Tokyo. His research involves building and studying Artificial Life systems publishing widely on artificial life, adaptive behavior and bio systems and since 2000 has collaborated on several art installations.

Natural and Artificial
Scientists get new ideas, play with them, work with them and experiment with them, before publishing them in academic papers. However, there are ideas that are difficult to express in the form of scientific papers. Science requires proofs and explanations—but science should not simply explain things, it should help to create a philosophy.

This is where the arts come in and assist the scientists. Art is not just about wrapping scientific ideas in beautiful design. Artistic expression is a part of scientific content. The same is true for artists who benefit from Science. Arts and sciences are not competing but cooperating to develop new ways of understanding and creating phenomena, natural and artificial.

Since 2000, Takeshi Ikegami has worked with Carsten Nicolai (media and sound artist), Keiichiro Shibuya (sound artist and music composer) and Kenshu Shintsubo, (artist and a photographer). Through his collaborations, he came to understand their attitude towards natural and artificial phenomena. The art/science installation Mind Time Machine (2010) produced an artificial brain system, able create subjective time by interacting with the real world. His paper will discuss his creative and adventurous approach to working with artists.
Margaret Wertheim

Margaret Wertheim is a writer and curator whose work focuses on the intersections of science and the wider cultural landscape and co-director of Institute For Figuring with Christine Wertheim. Margaret is currently serving as a 2015 Vice-Chancellor’s Fellow at the University of Melbourne.

Feral Institutions – Diversifying our Knowledge Landscape

New types of knowledge call into being new types of institutions. As the scientific revolution got under way in the sixteenth and seventeenth centuries, practitioners of natural philosophy formed Academies and Societies (such as the Academia dei Lincei, that counted Galileo as a member, and the Royal Society, that Newton helped found), as spaces where the emerging understanding of science could be shared and expanded.

Today our knowledge landscape is again undergoing tremendous upheaval. Traditional domains of hyper-specialization are being augmented by polymorphous explorations and interdisciplinary collaborations that combine say mathematics and molecular biology, or neurobiology with art. Diversification also extends beyond formal centers of academic learning.

Especially in Los Angeles, which is witnessing the emergence of a whole new kind of institution residing at the nexus of art, science, and pedagogical practice, venues such as the Museum of Jurassic Technology, the Center for Land Use Interpretation, the Velaslavasay Panorama, and the Institute For Figuring, offer novel experiences that refer to, reflect on, inquire into, and extend the fare available at more traditional museums.

In this talk Margaret Wertheim will discuss the ‘feral institutional’ landscape of Los Angeles, and highlight projects at the IFF that utilize practices commonly associated with the arts to forge new pathways into science and mathematics.