



Engagement and Impact 2018

Queensland University of Technology QUT19 (CAH) - Impact

Overview

Title

(Title of the impact study)

Confronting urgent environmental and social issues: Arts-thinking and practice in action

Unit of Assessment

19 - Studies In Creative Arts and Writing

Additional FoR codes

(Identify up to two additional two-digit FoRs that relate to the overall content of the impact study.)

12 - Built Environment and Design

Socio-Economic Objective (SEO) Codes

(Choose from the list of two-digit SEO codes that are relevant to the impact study.)

95 - Cultural Understanding

Australian and New Zealand Standard Industrial Classification (ANZSIC) Codes

(Choose from the list of two-digit ANZSIC codes that are relevant to the impact study.)

90 - Creative and Performing Arts Activities

Keywords

(List up to 10 keywords related to the impact described in Part A.)

Digital Media Art

Art Science			
Dung Garata da Danasa sak			
Practice-led Research	Practice-led Research		
Creative Arts			
Creative Arts			
Visual Arts			
Environmentalism			
Sensitivities			
Commercially sensitive			
No No			
140			
Culturally sensitive			
No			
Sensitivities descripti	on		
(Please describe any sensitivities in relation to the impact study that need to be considered, including any particular instructions for ARC staff or assessors, or for the impact study to be made publicly available after El 2018.)			
Aboriginal and Torres Strait Islander research flag			
(In this impact at the appointed with Abariginal and Tarras Strait Islander content?			
(Is this impact study associated with Aboriginal and Torres Strait Islander content? NOTE - institutions may identify impact studies where the impact, associated research and/or approach to impact			
relates to Aboriginal and Torres Strait Islander peoples, nations, communities, language, place, culture and			
knowledges and/or is undertaken with Aboriginal and Torres Strait Islander peoples, nations, and/or communities.)			
No			
Science and Research	n Priorities		
(Does this impact study fall within one or more of the Science and Research Priorities?)			
Yes			
Science and	Branding I Brands and Obellands		
Research Priority	Practical Research Challenge		

Science and Research Priority	Practical Research Challenge
Environmental change	Options for responding and adapting to the impacts of environmental change on biological systems, urban and rural communities and industry.

Impact

Summary of the impact

(Briefly describe the specific impact in simple, clear English. This will enable the general community to understand the impact of the research.)

Underpinning contemporary ecological crises such as climate change, species extinction and environmental degradation lies a deeper cultural crisis. Keith Armstrong's arts-led interventions into socio-ecological questions have promoted a substantial rethinking of the role of the digital media artist in engaging with, and impacting positively on, such dilemmas. His unique process for embedding artists in problem-based transdisciplinary teams has brought the impacts of creative arts-thinking and action to bear upon these problems, which he further amplifies through his international practice of exhibitions and events. His innovative, blended processes are now in demand given their proven capacity to build the cultural conditions within which solutions to such deep-set dilemmas can be found.

Beneficiaries (List up to 10 beneficiaries related to the impact study) Australian Wildlife Conservancy Queensland Bat Conservation and Rescue Program Innovation Artform Development, South Africa Qala Phelang Tala, Not-for-Profit Organisation, South Africa Centre Development Studies, Bloemfontein, South Africa Andrew Mellon Foundation, USA Flanders Foundation, Belgium National Gallery China/China National Museum Science & Technology, Beijing

Vrystaat Kunstefees Arts Festival/Bultfontein Arts Centre South Africa

UTS Gallery; Australian Design Centre, Sydney; Powerhouse Museum, Brisbane; Queensland Museum, Brisbane

Countries in which the impact occurred

(Search the list of countries and add as many as relate to the location of the impact)

Australia		
China (excludes SARs and Taiwan)		
South Africa		
New Zealand		
India		

Details of the impact

(Provide a narrative that clearly outlines the research impact. The narrative should explain the relationship between the associated research and the impact. It should also identify the contribution the research has made beyond academia, including:

- who or what has benefitted from the results of the research (this should identify relevant research end-users, or beneficiaries from industry, the community, government, wider public etc.)
- the nature or type of impact and how the research made a social, economic, cultural, and/or environmental impact
- the extent of the impact (with specific references to appropriate evidence, such as cost-benefit-analysis, quantity of those affected, reported benefits etc.)
- the dates and time period in which the impact occurred.

NOTE - the narrative must describe only impact that has occurred within the reference period, and must not make aspirational claims.)

Armstrong's digital media arts research practice engages global, problem-based, transdisciplinary teams to address complex environmental and social sustainability issues. His distinctive process for embedding digital media artists in transdisciplinary teams has identified new methodological roles for media artists in re-imagining and re-thinking the contexts required for socially and ecologically sustainable futures. As well as creating new impact-focussed processes for creative arts research engagement, he has also widely disseminated new knowledge generated through these processes through high-impact exhibitions, events and festivals.

For Project Re-Introduction (2012-3) Armstrong worked with the Australian Wildlife Conservancy, identifying that their existing survey instruments for rare mammal conservation were limited to tangible numerical and descriptive data. By co-developing a complementary cultural surveying process with the scientists, Armstrong challenged them to question the limits of their data gathering and underlying worldviews to produce new systems of thinking that put the environment first. This research was amplified by the 2013 artwork/survey model Pitfall, presented for the Mildura Triennial (est. audience 3500). The significance and impact of this fresh paradigm was recognised through funding by the highly competitive Australian Network for Art and Technology's Synapse Art-Science program. (Primary impact/extent: regional).

Between 2011-2015 Australian flying fox scientists, behavioural scientists, and the Queensland Bat Conservation and Rescue Society were battling national public anxiety over increasing numbers of these vulnerable animals entering cities and towns. Armstrong's team of scientists, architects, urban planners, artists and 'pest' managers successfully engaged with Sydney Botanical Gardens, with whom Armstrong co-developed positive, creative cohabitation proposals. This led to the creation of a major public festival and debate, The Bat-Human Project: Multidisciplinary Public Performance Event, 2011, Cook and Phillip Park, Sydney (est. audience 3500). Numerous invitations to extend the reach and impact of this research resulted. They included:

- Finitude (2012) Information, Ecology & Wisdom, 3rd Art & Science International Exhibition & Symposium, National Science Museum, Beijing, China (est. audience 45,000);
- Light of Extinction (2014) for the International Triennial of New Media Art, National Art Museum of China (est. audience 80,000):
- Night Rage (2013) Powerhouse Museum Sydney/International Symposium for Electronic Arts, 2013 (est. audience 5,000)
- Night Fall (2103-14) Queensland Museum INVENTory space, with public workshops and seminars (est.

audience 15,000)

- Black Nectar (2015) Siteworks Festival, Bundanon, NSW. (est. audience 1,500)
- UTS Gallery Sydney with USA designer Natalie Jeremijenko (est. audience 4,500),
- Uncanny Intimacy (2015) Australian Design Centre, Sydney, (est. audience 3,000), supported by scientists from the Australian Museum who loaned an important collection of bat specimens to the project.

Through the transdisciplinary ArtsLab project comprising media artists, designers, and engineers, Armstrong applied his research approach to create powerful 'images' of what a citizen-led, sustainable world might be, constructing future sustainability models from 'lost/forgotten' knowledges and intercultural communication. The Remnant Emergency Artlab (2011-2012) was funded by the Australia Council's InterArts ArtLab Program and developed at Artspace, Sydney; SCANZ EcoSapiens Festival, New Zealand; and Thiruvananthapuram, South India. High-impact dissemination exhibitions and events were delivered at Floating Land Festival, Noosa, 2011 (est. audience 300); Remnant Breath, EcoSapiens Festival (2011) (est. audience 2,300); and Right to the City exhibition, Tin Sheds Gallery, Sydney, 2011 (est. audience 3,000).

The steadily increasing reach and impact of these projects led Armstrong to be invited as lead artist for the project Re-Future (2015-16) to mentor African creative practitioners and local NGOs to creatively evolve grassroots ecosocial building and sustainability projects. Embedding himself in a transdisciplinary team of township residents, artists and international development workers, Armstrong and his team set out to reimagine and build creative, nocost houses to replace residents' tin shacks, located on 'waste' ground in -5 to +40-degree temperatures in the townships of Bloemfontein/Manguang, South Africa. Arts-led training programs in building methods were devised and implemented to upskill researchers and residents (e.g. Namibia Square Replacement House, 2015 and Bultfontein Arts Centre, Twelopele Municipality, 2015-16). This led to the iconic Caleb Motshabi Replacement House, 2016 - a striking residence created from a unique design of bonded mud, water, tyres and bottles.

The project had significant flow-on health benefits for the house's owner-builder Mokena Maphalane, who used the project as a powerful personal vehicle for recovering from a stroke. Benefits were further facilitated through work exchange programs and staff training programs developed with Mangaung Community Clinic including involving approximately 20 other patients throughout the build. Drawing on Armstrong's reimagined design process, previously underemployed 'change agents' established their own building businesses in building training, and in contract building (resulting structures include Trompsburg Skate Park, 2016, Fauresmith Play Park, 2016 and Early Childhood Development Centre, Delft, Cape Town, 2016). Other impacts included increased local funding (PIAD initiative and Flanders Foundation), enhanced land tenure (awarded via ANC council process) and new arts-led initiatives (poetry/resilience/digital storytelling). (Primary impacts: economy, society, culture, environment. Extent: international).

Associated research

(Briefly describe the research that led to the impact presented for the UoA. The research must meet the definition of research in Section 1.9 of the El 2018 Submission Guidelines. The description should include details of:

- what was researched
- when the research occurred
- who conducted the research and what is the association with the institution)

Armstrong's research has actively addressed social and ecological themes via artistic and transdisciplinary practice for over two decades.

For example, his interdisciplinary work Intimate Transactions received Honorary Mention in the 2005 Prix Ars Electronica in Austria, represented Australia at the National Gallery of China for 'Media Art China' during the 2008 Olympics Cultural Festival, was shown in 22 venues including the ICA London, and is now held in the permanent collection of ZKM Centre for Art and Media, Karlsruhe Germany. His interactive installation, Shifting Intimacies, developed during an Arts Council England residency, premiered at the ICA, London. Recent works Night Rage and Long Time, No See? featured in ISEA 2013 Sydney.

Through 2011-15 Armstrong forged important new collaborative partnerships with a range of biodiversity conservation organisations and ecologists across the Australian continent. This resulted in a series of major commissions for works, including the Sydney Powerhouse Museum, the Queensland Museum, Media Art China and Siteworks Festival at Arthur Boyd's property, Bundanon.

Armstrong was an Australia Council New Media Arts Fellow, a doctoral and postdoctoral New Media Fellow at QUT, and a lead researcher at the ACID Australasian Cooperative Research Centre for Interaction Design. These roles allowed him to build his networks, track record, and his methodological approach to social, ecological, and media arts impact.

FoR of associated research

(Up to three two-digit FoRs that best describe the associated research)

19 - Studies in Creative Arts and Writing

References (up to 10 references, 350 characters per reference)

(This section should include a list of up to 10 of the most relevant research outputs associated with the impact)

[1] Armstrong K M, Venter A, Maphalane M (2016) Caleb Motshabi Replacement House, Building, Caleb Motshabi Township, Stand 921, Bloemfontein, South Africa. http://eprints.qut.edu.au/112234

[2] Armstrong K.M. (2016) Over Many Horizons, Solo Exhibition, UTS Public Art Gallery, Sydney. http://art.uts.edu.au/index.php/exhibitions/over-many-horizons/

[3] Armstrong, K.M. (2016) Embodying a Future for the Future: Creative Robotics and Ecosophical Praxis. FibreCulture Journal, 28, p.1-20.

[4] Armstrong, K.M. (2014) Re-imagining utopias: The bat/human project. Leonardo Journal, 47(3), p.282-285. DOI:10.1162/LEON a 00782

[5] Armstrong, K.M. (2014) 'Conversations before the end of time': Refuturing applications of a new media praxis. In Barrett, E. and Bolt, B. (Eds.) Material Inventions: Applying Creative Arts Research (pp.50-66) London, LDN: IB Tauris.

[6] Armstrong K.M. (2014) Wasting time? Art, science and new experience: Examining the artwork, knowmore (House of Commons). In Lee, Newton (Ed.) Digital Da Vinci: Computers in the Arts and Sciences (pp.113-127). New York, NY: Springer. DOI:10.1007/978-1-4939-0965-0_6

[7] Armstrong K M, English L P, Lickfold L (2014) Light of Extinction, Installation, International Triennial of New Media Art, National Art Museum of China, Beijing, China. https://eprints.qut.edu.au/70942/

[8] Armstrong K M, English L P, Lickfold L. (2014) Black Nectar, Installation, Siteworks Festival, Bundanon, Bundanon Trust, NSW. http://eprints.qut.edu.au/83833

[9] Armstrong K.M. (2015) Uncanny Intimacy, Installation, Object Gallery, Australian Design Centre, Sydney. http://eprints.qut.edu.au/87381

[10] Armstrong K M, Dean R, Lawson S, Finitude: Mallee: Time (2012) Installations, National Museum of Science and Technology Beijing & Screenspace Gallery, Melbourne & Artisan Gallery, Brisbane. http://eprints.qut.edu.au/56742

Additional impact indicator information

Additional impact indicator information

(Provide information about any indicators not captured above that are relevant to the impact study, for example return on investment, jobs created, improvements in quality of life years (QALYs). Additional indicators should be quantitative in nature and include:

- name of indicator (100 characters)
- data for indicator (200 characters)
- brief description of indicator and how it is calculated (300 characters).)