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Barbara Milech

Sarah McGann

University of Notre Dame Australia, sarah.mcgann@nd.edu.au

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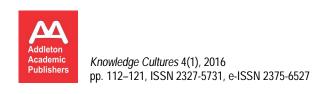


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SHARED DIFFERENCES: CREATIVITY IN GRADUATE RESEARCH

BARBARA MILECH

b.milech@curtin.edu.au
Curtin University
SARAH MCGANN

sarah.mcgann@nd.edu.au University of Notre Dame Australia

ABSTRACT. In this article, we talk about the centrality of something that "feels creative" in the research process. We talk across shared differences – different but cognate disciplines, different but cognate migrant histories, and the shared difference of a (past) supervisor/supervisee relationship. And we talk about that "something" as it relates to three important dimensions of graduate research: the *nature* of a creative-production thesis; the *process* of making/writing such a thesis; and the *potential* of a supervisory relationship pertaining to such making/writing. We want to think about graduate research from these perspectives in order to finesse any seductive opposition between "traditional" and "creative" research; to imagine ways in which doctoral research students go about developing elegant theses, especially the strategies that work for creative-production researchers; and also to imagine how the supervisory relationship, albeit structurally hierarchical, can be collegial and productive – can be creative. We do all this in aid of thinking about what is transformative in higher-degree research for students, for supervisors, for universities.

Keywords: creative-practice; doctorate; supervision; cross-disciplinary; creative processes

Introduction

This article addresses the odd notion that traditional and non-traditional approaches to doctoral research are mutually exclusive, and makes the argument that both kinds are linked to the idea of being creative. In making this argument we do not explore theories of creativity – a rich, complex, century-long literature in Western civilization that would demand a longer

article, if not a thesis. Rather we scout the idea that creativity relates in intricate ways to traversing "difference" – differences in personal histories, differences in culturally given understandings, differences in the potentiality of (culturally given) genres. We argue that such traversals can find expression in traditional forms of research theses, but that they find especially potent expression in creative-practice theses – if only because the later sort of research finds a way to circumscribe meanings that express something not "always already" said, as Derrida might say, and so leaves room for creative understandings. Following on from this argument, we reflect on the relationship between supervisor and student, imagining it as a key component in fostering the creativity that characterizes what is best in doctoral research. And so we write from our mutual differences: from two different (migrant) histories, two different generations, two different work histories/disciplinary perspectives, two different experiences of having worked together as supervisor and supervisee.

Barbara: I completed a Bachelor's degree in literature at Chicago University in the late 1960s, then, after migrating to Australia in the mid-1970s, a "traditional" doctorate in literature at Indiana University (on Jane Austen). In Australia I taught literature and cultural studies at what is now Curtin University, becoming its Director of Humanities Graduate Studies in the late 1990s. In that transition I worked successfully with others across several disciplines to develop, and have accepted by Curtin University, higher-degree-by-research (HDR) master's and doctoral programs that entailed creative productions – one of the first such programs in Australasia. It was a struggle. Yet it felt creative (administration can be creative). And, as things progressed, I worked with a valued colleague from the School of Art, Ann Schilo, to develop what we named the research question model for creative-production HDR degrees (Milech & Schilo, 2004). That felt creative too – and it proved transformative for me as a supervisor, for several students working with or writing to me, and (I always hoped) for the university.

Sarah: I completed an architectural degree in Dublin in the 1980s and, following a decade of designing and building, came to Australia and academia. My doctoral topic sprang from a particularly intriguing building project I had designed, a hospice (see The Production of Hospice Space). It was a project that led me to many questions regarding spatial theories and the philosophy of palliative care. In time, it became a case-study subtending my research for what was simultaneously a traditional and a creative-practice doctoral thesis. My choice of Barbara as sole supervisor was based on my need to "speak" and be understood outside my architectural discipline, and to (re)learn the art of writing from an expert. Along the way, I discovered

amazing similarities between the writing process I was learning and the design process I was teaching. Some years on now, as a doctoral supervisor, I find my bricolage of traditional and creative-practice processes assists me in helping "traditional" candidates to think creatively and "creative-practice" candidates to structure their thinking. For me, transformative learning continues with each student I supervise, whether or not they work within a traditional or what is called a creative practice mode of doctoral research.

We tell these stories briefly to make a point: working across differences has something to do with the creativity that is fundamental to research (the feeling that draws one onwards). That said, it also needs to be said that working across differences of personal histories (especially when they are cognate) may not be as potent as working from such histories across different cultural understandings and different (culturally/disciplinarily given) generic forms. For in the latter case, "difference" has something to do with more than negotiating the sort of differences that pertain to migration, generations and the like in the context of a supervisory relationship. Instead, it critically pertains to the potency, as Milech and Schilo suggest in their explanation of the research question model for creative-practice research, of "answering" one question in two different "languages:" of approaching "the written and the creative components of the thesis ... as interdependent answers to the same research question – independent because each component of the thesis is conducted though the 'language' of a particular discourse, related because each 'answers' a single research question" (2004).

Barbara: The *Nature* of Creative-Production Research

As Picasso once said, to the shocked surprise of those around him

— I do not seek, I find.

Jacques Lacan,

Four fundamental concepts of psycho-analysis

When Lacan, in 1964, invoked Picasso to describe his kind of psychoanalysis as a "conjectural science" (p. 43), his purpose was to suggest its power to access "truths" of human experience not available to science or religion. In his view, truths of science are based on discovering something more about an "object" already determined by a scientific framework (p. 8), on elaborating and extending what is already known as "real" – by *re*-searching. Comparably, in his view, truths of religions are based on received knowledge, on verities given in holy texts, parables and sermons – on searching for a given truth: "Come, my heart says, seek God's face. Lord, I do seek your face" (Psalm 27.8, *Common English Bible*). Tellingly, when distinguishing his kind of

psychoanalysis from science and religion, Lacan draws on an artist's statement for his sense of his project.

Even so (even though he deploys an artist's statement as emblematic of his project), Lacan does not claim psychoanalysis is an art (perhaps because he wants the gravitas of its being a science – his "conjectural science"). But our thought is that Lacan has a certain ontology (understanding of the "real") and a certain epistemology (method for discovering that "real") that relates to the knowledge – and ethics – that art provides. He imagines that there is a subtending "Real" of human experience (invested in the unconscious) that cannot be directly expressed through the logic of Western sciences and philosophies, nor the rhetoric of religions, nor the discourses of societal compacts – something that can only be expressed in metaphors couched in the form of symptoms, parapraxes, dreams, flashes of wit, and the like. Something that cannot be *re*-searched, but only found ("found" because it is not the conclusion of a linear process of researching, but rather because the result of listening to and working from difference to understand something more than is given ...).

In this, Lacan's understanding of human experience has an affinity to Western culture's overarching aesthetic, expressed in different theories of art across centuries. Those theories, albeit grounded in very different notions of what is real/true, variously argue that art tells us something about what is "real" in human experience that cannot find direct expression in the languages of science or religion ordinary conversation. They claim that art tells us something that can be expressed only in metaphor, metaphor realized in words, images, movements, physical forms and the like: that a poem or painting or dance or sculpture or building says something implicitly by circumscribing meanings essential to human living - meanings neither directly stated nor predicted/shaped by a given framework, but rather found through non-linear ways of making/understanding, in the creation and reading/viewing. And those various Western aesthetic theories also make an ethical claim similar to Lacan's sense of the ethical imperative of his sort of psychoanalysis (to ameliorate the suffering of existential lack) when (bar Plato) they variously argue that art gives us a truth or beauty or healing lost to science and religion and ordinary understandings, a truth/beauty/healing that comes to us as a feeling of "discovery," as a "surprise," a feeling of being "overcome, ... [of] find[ing] both more and less than ... expected" (Lacan, 1979, p. 25).

In other words, Lacan prompts us to think about how important it is to understand the imbrication of ontologies ("this is real") and epistemologies ("this is how I know this is real") – and the sort of ethics any regime of knowledge entails ("this is the value to human life of this kind of knowledge/knowing").

We turn to a recent international exhibition – *Shared Sky* – to illustrate not only the imbrication of ontologies and epistemologies (and consequent ethics), but also the power of working, as creative-practice research does, across different understandings of what is real and different ways of knowing a reality (figures 7 to 9). Sponsored by the Square Kilometre Array (SKA) Organisation (SKA South Africa and SKA Australia), the exhibition was launched at Curtin University (Perth, Western Australia) on 30 September 2014.



This is how it happens: The sun comes, the day breaks, the darkness goes away. The sun sets, the darkness comes out, the moon rises. Moon brightens the darkness, taking away the darkness. The darkness departs. Moon goes along, brightening the darkness. Moon sets. Sun is following close behind. Sun slices at Moon with his knife, each day break, a little more. Painfully Moon goes along, decaying away. He cries out to Sun, "O Sun! Leave for my children the backbone!" Sun hears, and leaves alive for the children the backbone of the moon. A sliver. He puts on a new stomach. He's alive! He becomes large, he becomes whole. And so it goes on.

Figure 1: Sun Spare My Children (First People Artists, Bethesda Arts Centre, Nieu Bethesda, South Africa)

The human experience shared in this exhibition is the southern sky, but there are three different "readings" of those skies: those of contemporary African San people, expressed in collaborative textile art that recovers understandings disrupted by colonization suffered seven generations ago; those of scientists working within the SKA program, presented in images provided by linked radio-telescopes located in South Africa and in the Murchison region of Western Australia; and those of Yamaji and other Aboriginal artists of central Western Australia, expressed in contemporary pointillist paintings that rework traditional art practices to recover cultural understandings disrupted by some three generations of colonization.

The *Shared Sky* exhibition is exemplary of creative-practice research in that it works between ontological differences (three cosmologies) and epistemological differences (science imaging, visual/textile art, storying/discursive text).



Figure 2: Composite of Square Kilometre Array sites (Courtesy the SKA Organisation and Photowise)

Three communities contributed to the exhibition, each speaking from different cultural understandings and through different genres. Speaking in this way – across multiple differences – the exhibition says something that cannot be said directly from within any one cultural, scientific or generic framework. Speaking in this polyphonic way, the exhibition illustrates the power of creative-practice research, whose very structure (exegesis + creative production) instantiates the art of saying what cannot be said directly in any one social, scientific or generic discourse. Concomitantly, and not least, the exhibition illustrates the importance of communities talking across differences (several Yamaji Art Centre artists met with scientists from the SKA project while creating their works).



Nyarluwarri (Seven Sisters/Pleiades)

We were told to look for the Nyarluwarri when they dipped low on the night sky—like they are going down into the barna (earth) or into the wirlu (sea). ... This is a signal to show the start of the yalibirri warlangga (emu nesting).

Now hand this teaching to our younger generations.

This is our way – this is our teaching.

Figure 3: Venus. (Kevin Merritt [Wajarri], acrylic on linen, shown with accompanying text explaining Yamaji readings of the Pleiades)

That is, the exhibition illustrates the importance of finding ways to talk about more than one "reality," in more than one "language" - to talk across difference in order to say something of value. Such talk does not proceed, like an Aesop fable, in a linear fashion, where a story is reduced to a moral; nor does it proceed like Thomas Kuhn's "normative science," where given models of things place boundaries on what can be found. Rather, the Shared Sky exhibition deploys the poetic technique of juxtaposition to create a montage of expressions in different "languages" – a montage that demands both comprehension and apprehension (demands to be understood both logically and poetically). To borrow Lacan's terms, it both informs (searches) and finds (surprises) by circumscribing meanings – meanings that are inaccessible through a single social/scientific/generic discourse but that, when juxtaposed, allow us to apprehend something "more," to be surprised, to find something of value. In this way, the exhibition illustrates the driving idea of the research question model for creative-practice research as described by Milech and Schilo (2004).

There are, of course, different understandings in regard to what is meant by the research question model as it pertains to creative-practice research. For example Baz Kershaw remarks that British debates include the argument that the model implies "a more or less predictable range of responses" (2009, p. 112), and Robin Nelson prefers the term "research inquiry" since "questions imply answers" (2014, p. 96). This, of course, is not what is meant/implied by the "research question model" described here. Thus our drawing on Lacan's notion of *finding* rather than *re*-searching to deploy the understanding of the research question model sketched in "Exit Jesus" (Milech & Schilo, 2004) – it is a model that suggests a common question spanning two modes of inquiry can lead to "talking" across differences, to fostering the art of juxtaposition, to deploying (at least) two ways of understanding one aspect of human living side-by-side, so that something can be said in the interplay, something that can't be said any other way. Our sense is that this approach is creative – both in the making and in the reception.

Sarah: The *Process* of a Doctoral Journey

In my own doctoral journey, Barbara and I shared our differences within a process that felt creative to me. We introduced each other to interesting people along the way, talked across differences in more than one language and found new ways of knowing. As a creative-practitioner turned creative-academic, the process of making a doctoral thesis needed to be creative for it to be a meaningful part of my journey. According to Charles Landry in *The Creative City* (2000), creative thinking happens at the edge of competency, not at the center of it: for me the thesis process was certainly right at the cliff

face of my competency. I brought clear ways of working conceptually from my architectural background: focusing on the big idea (or the thesis statement); and developing and testing the idea through a mixture of scales, from large-scale overview back and forth to small-scale detail. Thus, the practice of building a sound structural framework to organize complexities of ideas and information in a logical sequence for a diverse audience sat comfortably within my expertise. However, doing all this with text was confronting – it was the point where I reached the far edge of my competency. But I found being at the edge to be a place of creativity and discovery, and a key discovery for me was the similarity between writing and designing.

Designers most often sketch out rough ideas and, gradually, after layers and layers of drawings and thinking, when conceptual clarity is reached, work up the detail development. Naively, I assumed writers used a different, a linear, process, beginning by writing the introduction and continuing until they reached the conclusion. I learned I was wrong about that, and so came to realize that writing a thesis and making a building entail similar, equally creative, processes. One small but cogent example of this realization was when I came to understand that the Table of Contents for my dissertation was not just a list of predetermined steps (an outline for a linear process), but rather a set of small-scale drawings/diagrams that amount to a site plan. In architectural/design practice, a site plan shows the key aim of the project, the environmental context, the main elements and their relationship, the approach, and the relative volume of elements against each other and against the space around them; and a small-scale drawing/diagram relates to the overview of the conceptual approach by showing the balance and sequencing of ideas/plans without distracting detail. When I saw my Table of Contents as akin to a set of small-scale drawings/diagrams that indicate the overarching site plan (conceived from the beginning but tweaked throughout), I felt free to work back and forth between my overarching thesis (my site plan/research question) and my arguments for it (my small-scale drawings). That is, I began to work in a non-linear fashion, across two modalities to say something that was important to me. Then I began to see that my Table of Contents could also be an invitation to a reader, an invitation to follow a particular line of inquiry to explore, for their own purposes and from their own experiences. In short, I found that the sort of testing along the way that is an integral part of any creative practice applied also to the making of my thesis.

The terms "making" and "process" are used extensively in creativepractice disciplines, such as art and architecture, to describe their methods, systems and production. They are often used to emphasize the importance of rigor to every artist's, architect's and designer's work – and so the importance of rigor in tertiary-level research. In teaching architecture, I often draw on Horst Rittel's design process diagrams (also referred to in key designstudent readers such as Gänshirt 2007 and Anderson 2011) to explain to students the back-and-forth processes that designers might use to solve complex problems, and to reassure students that self-critique of ideas, as a part of informed decision-making, is an essential step in moving any project forward.

Rittel's diagrams show four different approaches to problem solving, decision making and moving forward, which he names: 1) linear; 2) testing/scanning; 3) systematic production of alternatives; and 4) forming alternatives in a multistep process.

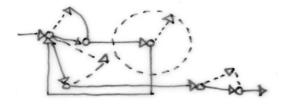


Figure 4: Testing or scanning (based on Rittel, in Anderson, 2011)

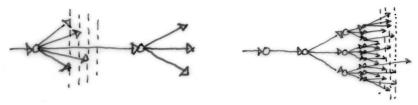
The first and simplest is the linear sequence (Figure 10), where activity and decision continue one after the other. Anderson suggests that this linear process might be used by established designers, but tends to inhibit innovation.



Figure 5: Linear sequence (based on Rittel, in Anderson, 2011)

Rittel identifies the second approach to problem solving, decision making and moving forward as "testing or scanning" (Figure 11), which entails an iterative process of moving forward and then stepping back for critical assessment until a preferred approach is found.

In two further creative processes, the "Systematic production of alternatives" (Figure 12) and the "multistep process" of making (Figure 13), judgment and decision-making are suspended until multiple approaches are developed and explored. The designer then uses constraints (such as, in architecture, budget, brief, aesthetic quality or contextual response) to move forward and choose the most appropriate approach for a particular project. Rittel finds these last two approaches leave the most room for innovation.



Figures 6 and 7: Systematic production of alternatives and Forming alternatives in a multistep process (based on Rittel, in Anderson, 2011)

New research students working against a semester clock and trying to avoid failure often use the linear process (Figure 10). Yet, as they gain confidence and learn the inevitability (and productivity) of failure, as part of a robust process of creating/writing, students usually move to variations of the testing/scanning model (Figure 11). They learn that the linear approach is rarely followed by researcher/practitioners looking for creative solutions to complex problems (albeit it may characterize a commercial approach). Even more, they may learn (as I did) that traditional text-based researchers in nonarts-based disciplines (at least in the humanities) do not follow a linear process in making/creating their dissertations, either, but rather engage in the same processes that are essential to producing a (creative, a creative-practice) thesis – imagining, researching, making, creating, re-making, structuring, writing and polishing.

When I discussed Rittel's design process diagrams with other doctoral supervisors from both traditional and non-traditional backgrounds, I found that they mostly used the testing/scanning method. However, one supervisor (in political science) commented that, despite using it himself, he recognized that he generally steered his own doctoral students towards the linear process. On reflection, he thought that perhaps his students were afraid to take the testing/scanning approach (Figure 11), as they perceived the back and forth process to be a more like a series of mistakes rather than forward progress. And another colleague from theatre and literature subsequently used the diagrams to structure a supervision discussion with his current doctoral student about the implications of using different processes. The student was re-assured to discover that he was not alone in using the testing and scanning mode.

Rittel's diagrams may not illustrate all design or writing processes engaged by research students. Most likely, both students and established researchers, in both traditional and non-traditional fields, use one or all at different points of production. To illustrate such variation, *and* to illustrate the creative impulse that flows from discussion across differences, here is still another model that diagrams the process of creative thinking/production/writing (a model suggested by Sarah O'Brien, a reviewer of this article, following a

conversation with Peter Wilkinson, her filmmaker colleague). My drawing is based on an inversion of Rittel's multistep process shown in Figure 13, above:

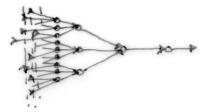


Figure 8: "A million hares running" (author's drawing of a model suggested by Sarah O'Brien and Peter Wilkinson, 2015)

This "million hares running" model best portrays my own way of working at this point as a researcher/practitioner/supervisor (albeit I have only recently formulated it through writing this article). It suggests the creative power of 'finding' one's way through alternatives when looking for a cogent response to a significant question (whether working within the language of one discipline or between the different languages of more than one discipline).

Similarly, the "million hares running" diagram portrays my sense of the supervisory relationship as I've experienced it, both as supervisee and as supervisor. The result of this reflection assists in understanding the overlap between the design and writing processes that make up non-traditional forms of doctoral research. In particular, this understanding enables the use of multiple methods and different ways of understanding to create a thesis – different methods and ways (different languages) that enable researchers to find their way to the edge of shared competencies, to moments of creativity.

The *Potential* of the Supervisory Relationship

"You want a satellite, Mars and his satellite!"

"I did not say, nor imply, a satellite.

I meant two single equal stars balanced in conjunction."

D. H. Lawrence, Women in Love

Participating in the now decades-long, but still critical, debate regarding the nature, place and significance of creative-practice research in the contemporary university, we have chosen to talk dialogically. We reckon the importance of our talking in this way, talking across differences, directly relates to the research question model invoked here. We were lucky – we worked across differences of disciplines and investments, and the moments of indecision and uncertainty that such differences entail, to find a "balance" that made the making of a thesis satisfying for us both. And so we invoke D.H. Lawrence's

notion of "two equal stars balanced in conjunction." That phrase can stand as a metaphor for the "research question model," where a potent practice-led (creative-production) thesis entails "two single equal stars balanced in conjunction" when it deploys the conjunction of (at least) two different modes of understanding a single question or experience.

That metaphor also could figure the best sort of supervisory relationship – one that works across differences of history, investments and goals to make something significant. But before settling comfortably into this metaphor, it is helpful to understand that *structurally* the supervisory relationship, like the gender relationship Lawrence rails against, is not equal – *structurally* the supervisor is positioned as "knowing" and the student as "needing to know" (Lacan railed against the similar structure of the conventional therapeutic relationship in which the therapist is positioned as the "one who knows"). That is, contemporary supervisory practices take place within a structure inherited from less democratic times in European universities, and reinforced by university regulations that perpetuate that structure. Not acknowledging and understanding this structure can be the reef upon which a supervision might founder.

In other words, it is always important to understand how the structures of things shape our doings. And so it is important to a successful, creative supervisory relationship that a supervisor understands that the structure of the relationship is fundamentally hierarchical, and so imbued with power dynamics. Her/his responsibility is to finesse that structure (and institutional regulations) in ways that enable conversations in which the research student finds her/his own question/argument/voice – ways that change the institutional power dynamics within which a supervisor and research student work. Put another way, *structurally*, the supervisor begins as an authority and a gatekeeper; and, if things go well, the role of the supervisor then modulates to being a critical reader (and supportive advisor), and then (in the best of all cases) to one of being a cogent reader/editor. On the other hand, structurally, the student begins as a supplicant, someone asking for the space and advice that will enable her/him to pursue an intuition, find a voice, make a creative text/object that says something significant, and so present a piece of research that commands an audience (and is credentialed). That is, supervisor and student not only come from different histories and interests, but they also work within a hierarchical structure. If they find ways to share their differences, if they have the confidence in one another to listen to each other and work the borders between their differences, they can modulate the given power dynamic of the supervisory relationship in ways that become creative, not only in the process but also in the outcome.

As Voltaire's Dr Pangloss might say, "in the best of all possible worlds," supervisor and supervisee can switch positions in the supervision process: the supervisor comes to learn from the research student.

A colleague of ours recently emailed a creative-production research student struggling to find a balance between the different "languages" contributing to her thesis (social-science perspectives, creative-writing textures), struggling to find her "center," her overarching concept, and so thesis structure, her "voice." He remarked:

While people advocating new approaches (such as exegesis-free creative PhDs) can be territorial, the 'boxes' surrounding most disciplines are becoming increasingly fluid and indistinct. ... Reflecting on my own experience, a person's vision of where they are/where they sit or fit is often fluid. I saw myself as an applied geographer with a leaning towards regional planning when I started the PhD and as an historical geographer when I finished it. At various times since then, I have seen myself as a scholar of tourism, heritage, and sustainability and, most recently, history without, I hope, succumbing to schizophrenia.

His reflections are telling in a number of ways. They mark a moment of crisis in the creative journey of one student – a moment every research student encounters (often more than once), but also a moment creative-practice researchers, undertaking to say something of importance through the complex process of talking in more than one language, are especially liable to. They suggest how supervisors trained in and/or identifying with traditional disciplines can be a rich resource for creative-practice researchers. They instantiate a supervisor's talking across disciplinary differences, and structurally-shaped power differentials. And, most of all, they emphasize that the borders between cognate disciplines are fluid – and that both creative-practice and traditional research which "border crosses" is often the most exciting work in our universities.

Our hope is that our talking across disciplinary differences and fluctuating power differentials suggests a kind of framework for creative-practice research students – a framework within which the supervisory relationship is dynamic, and the writing of the exegesis can be as exciting as the making of the artefact, where working within *and* between two languages leads to those energy-filled moments of surprise (of "finding") that give confidence in what one is saying across modalities, confidence in one's own voice.

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Images

Images from *Shared Sky*, an exhibition presented by John Curtin Gallery, Curtin University (Perth, Western Australia), and curated by its Director, Chris Malcom, in association with the international SKA Organisation (SKA-South Africa, SKA-Australia), the Yamaji Art Centre (Geraldton, Australia), and the First People Centre, Bethesda Arts Centre (Nieu Bethesda, South Africa). Curated by Chris Malcolm. 1 October-November 2014. Permission to use granted by Amanda Alderson, A/Project Officer, John Curtin Gallery, Corporate Relations and Development.

Figure 7: Sun Spare my Children. Collaborative art quilt. First People Artists, Bethesda Arts Centre (Nieu Bethesda, South Africa): Sandra Sweers, Jeni Couzyn, Naasley Swiers, Julia Malgas, Gerald Mei, Yvonnne Merrington, Maria Tamana, Frendoline Malgas, Felicity Tromp, Rentia Davidson, Esmerelda Tromp, Seraline Tromp, Merlyn Davidson, Rosie Jacobs, Angie Hendricks, Martin Lackay, Riaan Sweers, and James Hartlief.

Figure 8: Composite of Square Kilometre Array Sites. Courtesy the SKA Organisation and Photowise.

Figure 9: Merritt, Kevin. Venus. Acrylic on linen.