

# Indigenous Knowledge and Respectful Design: An Evidence-Based Approach

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## Introduction

As an Aboriginal educator and researcher, my work in Aboriginal cultural contexts is situated among the most gifted and productive population of artists, storytellers, and performers. This creativity is amazing, considering that the life conditions of Aboriginal people in Australia are among the worst in the world. A conception of this disadvantage can be seen in the life expectancy of Aboriginal peoples living in Queensland, which is 20 years less than the Australian national average. At present, we are conducting design-based social and emotional well-being research projects with Aboriginal community groups in partnership with Link Up Queensland.<sup>1</sup> As an Indigenous Knowledge (IK) academic, I work in design because design fits well with the visual and narrative basis of Australian Aboriginal cultures. Ethical frameworks for research in Indigenous contexts require participant-level engagement because we work with populations trying to recover from generations of violation.<sup>2</sup> Healing in this context is a trans-generational project to re-dress health inequity.<sup>3</sup> The social and emotional well-being of Aboriginal communities is a fundamental component of this objective, which suggests that visual and narrative approaches are essential methodologies.<sup>4</sup>

The term “respectful design” emerged from my contributions to Faculty of Design planning at Swinburne University of Technology. Although the phrase “respectful design” has some promise across the field of design, I present the IK approach described in this paper to promote a more socially responsible and environmentally engaged vision.

## Indigenous Knowledge and Respectful Design

IK is a layered understanding that includes divergent streams of knowledge related within natural systems. IK generally is ontological because inquiry is situated within an intelligent and intelligible world of natural systems, replete with relational patterns for being in the world. IK understandings arise in partnership with these existent and sustaining patterns of relation.

IK encompasses many divergent traditions that share many similarities; however, the most common shared thread of

- 1 Australian Bureau of Statistics (ABS), Australian Institute of Health and Welfare (AIHW), *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, (Canberra: Commonwealth of Australia, 2008), 152–82.
- 2 Mick Gooda and Jenny Brands, “Putting the Users of Research in the Driver's Seat: The CRCaH's New Approach to Research Development,” *Australian Aboriginal Studies* 2 (2006), 32. Deborah B. Rose, “Rupture and the Ethics of Care in Colonized Space,” *Prehistory to Politics: John Mulvaney, the Humanities and the Public Intellectual*, ed. Tim Bonyhady & Tom Griffiths (Carlton Vic, Melbourne University Press, 1997), 190–2.
- 3 Ian Anderson, Fran Baum, and Michael Bentley, *Beyond Band-aids: Exploring the Social Determinants of Aboriginal Health: Papers from the Social Determinants of Aboriginal Health Workshop, Adelaide, July 2004*, (Darwin NT: Cooperative Research Centre for Aboriginal Health, 2007).
- 4 Norman W. Sheehan et al., *Sustaining Connection. A Report into the Community, Spiritual, Social and Emotional Well Being of Aboriginal and Torres Strait Islander Citizens in Queensland* (Herston: University of Queensland, Advances in Mental Health, 2009).

IK is the experience of colonization.<sup>5</sup> Direct experience of colonial devastations has situated IK as an incisively critical and resilient ideology.<sup>6</sup> Colonization is very similar, regardless of context, because it is a recurrent action that implacably sweeps others and their understandings from the landscape. Colonial movements rend the world open for exploitation, establish zones of social and material entitlement, and routinely deny responsibility for subsequent social and environmental trauma.<sup>7</sup> As production-centered cultures expand, climates change, and as the social and environmental consequences of these movements impact on the world, an increasing number of groups experience this destruction.<sup>8</sup>

IK operates from the assumption that the world is alive and active in the same way that humans are alive and active. Respect is based on this ancestral understanding that we all stand for a short time in a world that lived long before us and will live for others long after we have passed. From this view, we can never know the full implications of any action; thus, IK respect is about showing care and awareness in the way we identify, explore, and assess meaning because we know our view is always incomplete. In some contexts, Indigenous respect is a productive inaction, where we remain still to observe the shifting patterns of others as a basis for future life-affirming action.

Indigenous respect preserves difference opposition and division in the knowledge that we all inhabit a living mutualism. In this sense, respect is a situated awareness that establishes clear demarcations so that responsive communications are made possible between opposing factors.<sup>9</sup> IK recognizes that natural systems intelligently respond to our violating acts and have the power to moderate human agency by making the world less livable for us. Respect involves a generationally deep observation of relations between humans and the movement of natural systems. It also involves a refusal to become the same as the oppressive powers that control our lives. This respect works because we know that natural systems are life-positive relations that make the world more alive and livable if groups make the correct choices. In this sense, Indigenous respect is an ontological learning principle that does not seek or propose an ultimate truth. Instead, IK seeks to identify positions that support life-affirming patterns embedded in our “being-with” the natural systems of which we are a part.

IK accepts that diversity is the basis of creativity and adaptation; therefore, it does not strive to convince others to become the same. Instead, IK proposes autonomy as a general principle. Autonomy generates a more complex, reflexive, and adaptive organizational state through individuated and diverse responses than could be achieved through any imposed understanding or central locus of control.<sup>10</sup>

Respectful Design presents the challenge of addressing natural systems by thinking more deeply, divergently, and connec-

5 Erica-Irene A. Daes, “Prologue: The Experience of Colonization Around the World,” in *Reclaiming Indigenous Voice and Vision*, ed. Marie Battiste (Vancouver, BC: UBC Press, 2000), 3–8.

6 Taiaiake Alfred, *Peace Power and Righteousness: An Indigenous Manifesto*. (Ontario: Oxford University Press, 1999), 10–23. Leroy Little Bear, “Jagged Worlds Colliding,” in *Reclaiming Indigenous Voice and Vision*, ed. Marie Battiste (Vancouver, BC: UBC Press, 2000), 77–83.

7 Norman W. Sheehan et al. “Denatured Spirit; Neo-colonial Social Design,” in *The Havoc of Capitalism. Publics, Pedagogies, and the Environmental Crisis* Gregory Martin et al., (Boston: Sense Publishers, 2010), 112–4.

8 Anthony J. McMichael, “Climate Change in Australia; Risks to Human Well-being and Health,” Nautilus Institute Austral Special Report, 2011. <http://www.nautilus.org/publications/essays/apsnet/reports/2009/australia-health.pdf/view> (accessed April 14, 2011).

9 Deborah B. Rose, *Dingo Makes Us Human. Life and Land in an Aboriginal Australian Culture* (Sydney: Cambridge University Press, 1992), 223–35. Norman W. Sheehan, “Indigenous Knowledge and Education; Instigating Relational Education in a neo-Colonial Context” (PhD diss., University of Queensland, 2004), 133–42.

10 Rose, *Dingo Makes Us Human*, 223. Sheehan, “Indigenous Knowledge and Education,” 133.

tively through design. The IK conception of Respectful Design is not based on what design is, what design does, or what design means; it is founded on how design positions itself in relation to natural systems and the social world. When informed by IK, Respectful Design is an aspiration for a deeper situational awareness that generates many divergent spaces where innovation can contribute positively to the well-being of the whole.

In my limited understanding, design is the active human intersection between materials products, social interactions, and environments; therefore, design occupies a pivotal position for any change in cultural direction. In modern society, design is central to production-oriented culture—a position that limits and directs design possibilities. Despite this control, design continues as a universal human process of engagement with the world through materials culture utility and possibilities. Design has always shown respect for the outside appearance of things because design acknowledges the “interior” social and cultural significance of utility. Respectful Design requires a slight shift in this conception, so that design learns to inform material and social production concerning the “inside” cultural shifts that enable life-affirming utility with the “outside” world of natural systems.<sup>11</sup>

### Visual Dialogue: An IK and Respectful Design Method

Deep equity is the inclusion of all identities, features, and factors because they are assumed to be equally aware, alive, and capable of voicing their concerns. In IK terms, deep equity requires methodologies that devolve the inherent power of leadership and equalize engagements across the research context. This stand may be contested, but if we adopt this position as a first step, our dominance over the context is minimized, and data are less centered on designer/researcher assumptions, projections, and desires. In this sense, the bias of IK research is toward deep equity as an informational holism for human subjects and the environments we inhabit. Dialogue, or “yarning circles” as they are known in Aboriginal vernacular, provide the equal sharing space where deep equity can be achieved. This space presents a challenging learning context, particularly in western knowledge contexts, because yarning circles are a de-centering initiative, whereas normative pedagogic and research modes codify information, centralize its interpretation, and regulate through its dissemination.<sup>12</sup>

Yarning circles are conducted under the simple rules that each person speaks in turn, holds authority for the time they speak, and reciprocates by speaking responsibly from self and not about others. This simple sequencing structure provides a safe space that enriches the creative potential of a group because, as the speaking role moves, individual statements become more spontaneous, merging and connecting to become an emergent and creative conversation between minds.<sup>13</sup>

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- 11 Tony Fry, “The Role of Design as a Contributor to Innovation, a Submission to the Review of the National Innovation System” (Griffith University, Queensland College of Art, 2008); Johan Galtung, “Cultural Violence,” *Journal of Peace Research* 27 (1990): 292; Sheehan et al., “Denatured Spirit,” 112–4.
- 12 Sheehan et al., “Denatured Spirit,” 111–3.
- 13 David Bohm et al., *Dialogue - a proposal*. (Bohm Dialogue 1992), <http://www.david-bohm.net/dialogue/> (accessed February, 2011).

Visual dialogue is an IK extension to the dialogic system, and it works because design is synonymous with human being in the world. In the same way that birds are related and continue through “nest,” humans are related and continue through “design.” The opportunity presented by this ontology is that visual dialogue can be conceived as an approach that investigates cultural, social, and environmental practices through visual and interactive processes embedded in the *being-with* of human groups. This approach fits well with the visual philosophy of IK, wherein making and sharing images is a deeply productive interaction—with each other and the world—that conveys significance and engages us relationally within the original shared cognizance of all “things.” The IK conception of an original shared cognizance is often referred to as the [Dreaming].<sup>14</sup>

Images position humans to view together and share explanations so that we can understand them. This relational agency establishes and maintains visual significance through cycles of revisitation and observation-learning. In this way, visual images not only draw relations “in;” they also “hold” relations together because images culturally connect the visual, cognitive, social, and pedagogic systems. Through visual philosophy, design is apprehended as an external mind that depicts the mobile and evolving shared consciousness of a collective. In this view, design is not just a process that produces new objects, changed situations, or enabled futures; it is *the* connective process that constitutes externalized cognition. The opportunity that production-oriented cultures miss is the one for informative engagement within natural systems relations, through the shared consciousness provided by visual philosophy.<sup>15</sup>

Visual dialogue is a versatile education and research program that commences with a simple design problem and a routine that prompts groups to engage in a range of interactive exchanges and negotiations that lead to a solution. The first stage in these examples involves the creation by participants of a drawing on a card; the card connects with a simple edge register pattern so that when a card is arranged next to the other cards, a whole group pattern emerges. The difference between dialogue and visual dialogue is that the visual arrangements are negotiated through movements, without speaking. The researchers usually start the visual dialogue and explain the routine once, and then let “divergences” and “mistakes” become part of the free play, with images prompted by the routine. This freedom creates many possibilities that produce many layers of information. The following brief examples illustrate the potential of this approach.

## Two Perceptions

In this visual dialogue routine, undergraduate participants were divided into groups to draw on cards and silently arrange the cards into a final pattern. Four participants were situated as observers and

14 Martin Ries, “Braque’s Ateliers and the Symbolic Bird,” *Journal of Aesthetic Education* 29:2 (1995), 23, <http://www.martinries.com/article1995GB.htm> (accessed April 14, 2011) Gaston Bachelard, *The Poetics of Space*, trans. Maria Jolas (Boston: Beacon Press, 1994), 170–93. Sandra Le Brun Holmes, *Yirawala, Painter of the Dreaming*. (Sydney: Hodder & Stoughton, 1992), 23–93; Sheehan, “Indigenous Knowledge and Education,” 61–5.

15 Alfred Gell, *Art and Agency; an Anthropological Theory*, (New York: Clarendon Press, 1998), 221–73; James Leach, “Differentiation and Encompassment. A Critique of Gell’s Theory of the Abduction of Creativity,” *Thinking Through Things: Theorising Artefacts Ethnographically*, ed. Amiria J. M. Henare, Martin Holbraad, and Sari Wastell, eds. (Routledge, UK: Abingdon, 2006), 177–83; Gregory Cajete, *Native Science, Natural Laws of Interdependence* (Santa Fe: Clear Light Publishers, 2000), 13–43. Sheehan, “Indigenous Knowledge and Education,” 102–13.

asked to record the negotiating movements of the cards and focus on any emergent images that occurred. The final arrangement of one group was in categorical order from left to right. The observer stated that the group broke the rules because only two participants made most of the rearranging moves. These moves tended to continually group the relational designs according to the internal structural qualities; thus, they involved a struggle for inclusion that centered on the divergent appearance of one particular card.<sup>16</sup>

The observer said that she really loved the final arrangement of the design because of the little “bird” shape that emerged in the central four cards. To the observer, the little bird appeared to be fluttering out from the “cage” structure on the right toward the “foliage” on the left. This observation was a surprise to the group because no one perceived the bird image during the negotiations, but the image was immediately apparent to everyone as soon as it was mentioned. From the group perspective, this bird image was a potent and emergent narrative that arose from the exclusion/inclusion struggle between two participants and included both of their cards. This group routine demonstrated not only that emergence is possible within a material context, but that it can be the most significant learning experience in that context. The image also mediated the conflict in the group because a simple image and potent message emerged from the conflict and amazed everyone.

### Breaking Rules

In the second example of visual dialogue, the final assessment task for a group of student teachers was to complete a connective design on a card and write a single word on the back that expressed a deep equity principle. Half the group was delayed, so those present were set the task of arranging their cards without showing each other the words written on the back; thus, they set a visual dialogue routine for the rest of the group to complete when they arrived. When the late arrivers were invited in, they were shown a large circle of colorfully drawn cards loosely arranged around a central card placed on a sheet of paper. The task given to these participants was to rearrange the cards in relation to the four themes written on a sheet of paper and then to reveal the words written on the back of each card. The second group of students did not connect the cards either; they left the same card in the center of the arrangement, and they rearranged all the other cards into four smaller circles around each of the four themes. Then they called the others back in, turned the cards over, and read out the words in sequence. In this double blind exercise, the amazing result was that, with very minor adjustment, the cards made cogent sentences that fitted with the assessment task and the themes (words added are in italics).

- Risk *the* compassion of unconditional love.
- Respect *and* honor non-judgmental relationships.

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16 Sheehan, “Indigenous Knowledge and Education,” 304–35; Norman W. Sheehan and Ian Lilley, “Things Are Not Always What They Seem: Indigenous Knowledge and Pattern Recognition in Archaeological Analysis,” *Collaboration in Archaeological Practice. Engaging Descendant Communities*, ed. Chip Cowell-Chanthaphonh and Thomas John Ferguson (New York: Altimira Press, 2007), 93–103.

- Inclusive values of imagination, humility, and freedom in the seen and unseen world.
- Integrity is the foundation of identity in mutual belief.

One of the participants described the experience in this course as learning how to build a small culture in a room using images and then being shown how to work with others in a group to operate this “culture;” thus, knowledge emerged from group interactions as in a conversation with unseen intelligence.<sup>17</sup>

### Just the Spark

The Sustaining Connections project provides training for facilitators in the visual dialogue process and then supports the development of connective art workshops in Aboriginal communities across Queensland. Responses to this project have been positive; one small rural community completed the project months ahead of schedule, with exceptional outcomes. Initial reports from participants stated that the program was just the thing people were waiting for. It is difficult for us to imagine the levels of marginalization experienced in these communities, but the comments offered by a social and emotional well-being worker in support of the project show how significant even small cultural instigations can be: “Many people here keep out of sight in their houses because, out here, life is easier if they just keep to themselves. The project got people out and got them together for a positive, self-identifying experience—something valuable to them—and a really strong, creative group emerged.”<sup>18</sup>

The paintings produced by this group connect together to produce a large mural that will be digitally recorded and exhibited. From these early results, it seems that the simple, connective structure is a spark that can spur cultural innovation toward social cohesion among marginalized groups.

### Engaging Natural Systems

The obvious question that arises in relation to these examples is this: Where is the natural systems engagement in these IK processes? This question reveals a peculiar trait of western/modern societies, which assume that natural systems must be controlled or excluded to enable civilized stability and order. Following from this assumption, engagement with natural systems requires a visitation with untouched traditional, wild, or sacred places or understandings “outside,” somewhere far away from civilization. Given the reality that all humans are natural systems, biologically enmeshed in the environment, and that, even in the most sterile or contaminated places, growth emerges and challenges human control, this assumed separateness is highly suspect.

IK accepts that natural systems relations are a constant, like gravity always connecting an incredibly diverse potential for growth in all contexts, regardless of disturbance. One difference

17 Sheehan, “Indigenous Knowledge and Education,” 333–56.

18 “Sustaining Connections Art Initiative,” Link Up Queensland, <http://www.link-upqld.org.au/art.html> (accessed April 14, 2011).

between western and Indigenous knowledge is that emergence is generally accepted in IK as a feature of natural system relations and that it demonstrates that we are working respectfully with these relations. In this sense, natural systems relations are the “gravity” of our biosphere, and creative emergence in its innumerable forms signifies the relational gravitas, the dignity and intelligence, of this systemically alive world.<sup>19</sup>

In a visual dialogue held in a small inner city park, one student observed that when Uncle David (an Aboriginal elder) started to speak, a kookaburra flew up and perched on a branch right above his head. The bird stayed still, looking down until he finished speaking, and then flew away. The student was amazed that this occurred, amazed that the indigenous participants saw this as a normal event, and amazed that none of her colleagues noticed the bird. Culture provides the framework in which we operate, and each cultural framework promotes and maintains assumptive structures that define our understanding of the world, the way we perceive in our shared contexts, what is possible, and what we expect to happen when we act. In visual dialogue, knowledge often emerges and fits with the actions and intent of groups. This outcome is not magic and special; it is simply inherent to the structure that a visual and relational outcome will emerge from a visual and relational process in a way that reveals a visual and relational world. The most significant outcome of visual dialogue is that it experientially demonstrates that a change of assumptive framework also changes outcomes in ways that challenge normative expectations.

Visual dialogue is most valuable because the structure of learning/inquiry promotes emergence, and this approach negates normative concepts of power and control. Indeed, the teachers/researchers are often marginalized in the most positive way because participants and the context cannot be rendered passive or assumed to be inert. In this way, visual dialogue is a training model for cultural innovation because it demonstrates that when the assumptive basis changes, so does everything else. Visual dialogue is a deep activism because it goes beyond political contestation and resistance to reveal and play out cultural assumptions; thus, everyone experiences the influence that assumptive structures have in everyday practice.

### **Envisioning Respectful Design as an Evidence-Based Approach**

The continuing health inequity of Aboriginal Australians demonstrates the immense difficulty societies have identifying and addressing problems that originate in their own marginalizing processes. Good evidence is not possible in many of these contexts because the best evidence is often socially unacceptable.<sup>20</sup>

In many social, institutional, and corporate contexts, evidence is implacably entwined with power and control. In settler societies, attitudes and processes that skew evidence are deeply ingrained

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19 David Bohm, *Wholeness and the Implicate Order* (London: Routledge and Kegan Paul, 1989), 62–73. Sheehan et al. “Denaured Spirit,” 101–3.

20 Richard G. Wilkinson and Michael G. Marmot, eds., *Social Determinants of Health: the Solid Facts*, (Oxford: Oxford University Press, 2006), 12–34; Michael P. Kelly et al., *The Development of the Evidence Base About the Social Determinants of Health* (Geneva: World Health Organisation, Measurement, Evidence Knowledge Network, 2006), 4–23; Sheehan et al., *Sustaining Connection*, 93–102.

especially within the institutional systems that seek to redress Aboriginal disadvantage.<sup>21</sup> Conflicting data are also fabricated through politically sponsored counter-research that supports many forms of exploitation. EBR must be well defined because it should be open to contestation; however, in many critical zones, even the best evidence is systemically and intelligently undermined. If design seeks to become respectful in a manner informed by IK, then design needs to reconfigure the evidence base to reveal and explicate ideological bias and systemic cultural resistance.<sup>22</sup>

EBR, by definition, operates in contexts that are not unknown but require reevaluation to monitor situational change, often using new methods for inquiry. This reevaluation presents some difficulties; for example, the word “evidence” is easily misrepresented and might be taken to mean information presented as a basis for judgment within a fundamentally public and political debate. This allows competing forces to play on and obscure research in critical contexts (e.g., the environment), stalling responses to pressing concerns and resulting in a general anxiety. In this sense, defining the evidence base as *the most accurate and current knowledge of the situation or context* is essential because it provides the certainty required to support community well-being, in contexts where problems affect everyday life.<sup>23</sup>

EBR as it is understood in health inequity is based on principles for best evidence identification. Adapting these EBR principles to identify a best evidence-based practice for Respectful Design opens up a distinct stream of methodological development informed by the IK conception that design is ontologically human. This proposal presents design with elemental tools that may assist methodologically in the development of a design standpoint that acknowledges our inter-reliance embedded within natural systems.<sup>24</sup>

#### *Equity Comes First*

The primary value underpinning EBR is a deep commitment to equity. This principle is not scientific and rationally derived; it is, instead, a value position asserting that everyone in a population has a right to information that is accurate, meaningful, relevant, and understandable. This value position is derived from social determinants research that directly relates inequity to poor health through practices that are unfair, unjust, and disempowering. Equitable research is necessary because there is a direct correlation between good data, the equality of all participants, and informed and empowered action. This value contrasts with arguments asserting that differences in social and environmental awareness are a consequence of informational complexity; cultural differences; or disinterested, resistant, and backward communities. IK informs us that an explanative gap between researcher and participant population is a methodological failure that seeds vulnerability.

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- 21 Mick Dodson, “Bully in the Playground: A New Stolen Generation,” in *Coercive Reconciliation. Stabilize, Normalize, Exit Aboriginal Australia*, eds. Jon Altman & Melinda Hinkson (North Carlton Victoria: Arena Publications Association, 2007), 85–96; Michael Mansell, “The Political Vulnerability of the Unrepresented,” in *Coercive Reconciliation. Stabilize, Normalize, Exit Aboriginal Australia*, eds. Jon Altman and Melinda Hinkson (North Carlton, Victoria: Arena Publications Association, 2007), 73–84.
- 22 Stephen J. Millroy and Michael Gough, *Silencing Science*, (Washington: Cato Institute, 1998), 41–5; Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (New York: Bloomsbury Publishing, 2010), 63–82.
- 23 Sheehan et al., “Denatured Spirit,” 103–9.
- 24 Nigel Cross, “Designerly Ways of Knowing: Design Discipline Versus Design Science,” *Design Issues* 17 (2001), 49–52. Sheehan, “Indigenous Knowledge and Education,” 288–304.



IK proposes that the best basis for evidence in a context is the empowered, informed, and aware inhabitants of that context. Equity is therefore a first principle for Respectful Design.<sup>25</sup>

#### *The Context Is Alive*

The space we inhabit cannot be assumed to be the null void that was contrived as the background for early theory development in the physical sciences. Objects, beings, and the interactions and relations between them generate social and natural spaces. In this sense, social and natural space is alive and has a history and a *feel* that influences all inhabitants. IK recognizes the living quality of space because space exercises a positioning power on us all. Like any living thing, social and environmental space has exterior apparent conditions and internal hidden processes that are essential to the life of the space and all life within. Social and natural environments share these relational dimensions, where the most significant elements are often hidden from view. IK respect is a context-relevant pragmatism required because inquiry must be aware of deeper inter-reliance, especially when so many social and natural spaces have been disrupted, violated, and wounded.

Equity practically situates inquiry within social and environmental space that at the very least has been disturbed by previous acts. Equity is a value position within the mainstream assumptive base; however, in the assumptive base of the colonized, deep equity is a scientific principle because it reinstates the essential connections that make evidence gathering possible and findings authentic. As is evident in the many ethical frameworks devised for research in Indigenous contexts, IK deploys deep equity to foster a safe social space where inquiry can be conceived and owned by the marginalized in ways that contribute to their well-being. In this sense, participants are the only reliable experts concerning their social space, its features, and effective inquiry in this context.<sup>26</sup> Respectful Design focuses on methods that activate this contextual expertise to reveal the informing voices of social and natural systems.

#### *Negotiation Is Good Science*

Respectful design is founded on a belief that negotiation offers the best basis for research design and that dialogue and visual dialogue are very effective forms for negotiation. Research is a relationship-building process across a participation field, where dialogic and visual approaches establish equal negotiations to ensure that “science” (e.g., the necessary concord between the method of inquiry and the features under investigation) is maintained as the primary objective. Design and research are human activities, so it simply is not good science to study other humans from an imagined distance or to examine one group from the assumptive basis of another. Information about a group is not the same as information from a group; humans with different experiences see things differently, and

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25 Kelly et al., *The Development of the Evidence Base*, 4–23; Sheehan et al., *Sustaining Connections*, 93–102.

26 Australian Health Ministers’ Advisory Council, *Cultural Respect Framework for Aboriginal and Torres Strait Islander Health, 2004–2009* (Adelaide, South Australia: Department of Health, 2004); Sheehan et al., *Sustaining Connections*, 93–102.

this difference has immense value for the Respectful Design evidence base. Through visual and dialogic negotiations, Respectful Design authentically cedes ownership of methods in the interest of good human science.<sup>27</sup>

#### *Diversity Is Also Good Science*

EBR demands methodological diversity because no single approach to the collection and analysis of data can be favored over others. The context-independent prioritization of a particular method cannot generate good evidence because fallacies easily emerge and are promulgated when data are evaluated through an imposed evidence hierarchy. Particularly in cross-cultural contexts, the legitimacy of evidence depends on the correspondence between the method and the assumptive context in which it is implemented. Respectful Design appraisal of evidence should address the question of research ownership directly by designing investigations that open up pathways for diverse research partnerships. Best evidence arises from the *researched* when they maintain possession and control of their information, formulate and apply their own language for description and analysis, and engage authentically in ways that provide opportunities for new self-conceptions.<sup>28</sup>

#### *The Whole Truth*

EBR is holistic, not simply because it strives to include the understandings of everyone but because good evidence necessitates whole-system problem identification. The lesson from health inequity is that research must embrace socio-economic, historic, cultural, and environmental issues and must include consequences from the dominance, exploitation, denial, divisive attitudes, disarray, and unexamined negative behavior often apparent in problem spaces. Differences in problem identification expose deeper levels for analysis because the same negative features are often seen from different perspectives as right and good. The holistic approach is vital because it situates Respectful Design so that it intercedes in divisive contexts and productively weaves together views that silence others, views that are silenced, and views disposed to contest the data with findings that authentically emerge and are apparent to all. In this way, the holistic approach strives to render evidence informative, relevant, and useful across all dimensions of a problem space.<sup>29</sup>

#### *Resilient Evidence*

The power of evidence is limited because humans create understandings that are experienced as something more than human products. Thus, many social domains habitually defend assumptive frameworks that influence the way things not yet known will come to be known. Causal pathways often intersect with and potentially undermine beliefs that are deemed essential to individual and group security. A complete understanding of causal pathways requires the

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27 Kelly et al., *The Development of the Evidence Base*, 4–23; Sheehan et al., *Sustaining Connections*, 93–102.

28 Ibid.

29 Ibid.

suspension of judgment so that all assumptive frameworks may be equally related as key informing elements of a problem space.

Communicating diverse evidence without judgment creates space for groups to self-identify assumptions that are methodologically causal. This de-centering aspect of Respectful Design produces resilient evidence because the refusal to judge other beings and the ability to equitably represent even those things we may see as aberrant preserves divergent views and deepens the engagement of all participant groups. This ontological equality also provides opportunities to redefine our conception of evidence, maintains the different views necessary to address extreme subtlety and complexity, and increases the persistence of evidence across divisive contexts as an independent and enduring influence.<sup>30</sup>

#### *Sustainable Evidence*

Evidence must exhibit descriptive growth and flexibility because societies and cultures are fluid, dynamic processes, and causal factors are also shifting and changing. Planning for sustainable evidence means considering the extent to which the evidence represents the living and dynamic relations and tensions in the research context. Equity negotiation and non-judgmental inclusion present Respectful Design with an opportunity to embed dynamic social variations and differences into evidence. In the interest of sustainable evidence, it is essential that design must respond to these dynamics as a whole because, together, they constitute a fluid interactivity that can be disturbed, ignored, or harnessed.

Research findings are generationally embedded in social dynamics that often automatically render those findings redundant or irrelevant. EBR cannot be a transient fashion or trend. Through Respectful Design, evidence has the potential to become sustainable because it is re-conceived and positioned as a companion movement, embedded through cultural innovation into the long-life of social groups.<sup>31</sup>

In the same vein, societies are aware that we can no longer assume that the world is a passive reservoir of mere resources that “appear” as material in our products and that “disappear” when utility has ceased. In IK terms, everything in natural systems is alive because we all have entwined and interrelated origins and destinations. Respectful Design ultimately involves the life-cycle design of “material” as a cultural innovation embedded within production, so that progress can be reconceived as a companion movement within natural systems.

#### *Explicate Bias*

All research methodologies are cultural artifacts; therefore, bias is more or less present in all data. An imperfect solution is to acknowledge this fact and to determine the effect that bias has on data selection, analysis, interpretation, and the communication of

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30 Ibid.

31 Ibid.

findings. In doing so, we cannot assume that an underlying truth free of bias exists. Bias is a pathological condition in some contexts, established in terms of “for,” “against,” “neutral,” and many other socially approved positions that have been adopted in relation to certain others and their understandings. Indeed, bias may inhabit and inform a group’s conception of reality, rewarding abhorrent acts against human and natural systems.

Regardless of the assumed or actual veracity of these different positions and the validity of arguments applied to them, it is the very sense of entitlement to assess, contest, and decide “truth” for or about “others” that directly correlates to biased evidence. Making decisions about natural systems as if they are “other” is a dangerous form of this pathological bias long recognized by Indigenous peoples as a feature of modern culture. Bias also inhabits the normative structures of research that privilege certain methods for inquiry.

Respectful Design workers must be the first to know, understand, and communicate their biases and make the influence of their perspectives on evidence and products explicit. Finally, the key task of Respectful Design is to implement, test, and refine methodologies that normatively expose and explicate bias.<sup>32</sup>

#### *New Wicked Problems*

Wicked problems arise and prevail in contexts where conflicting understandings exist, data are socially entangled, political imperatives prevail, and epistemic conventions limit problem identification. We might see global warming and Aboriginal health inequity as examples of problems that prevail because they emerge from and are perpetuated by behavior that is integral to social life. Solutions are often seen as a threat in these instances because they reveal social, economic, and behavioral entanglement with the problem. As populations grow and environments change, we can expect a future where wicked problems increase and have a greater effect on individual well-being.

In response, Respectful Design aims to preemptively create spaces for cultural innovation. Cultural innovation happens when a group perceives its’ own assumptive framework and related implications and attempts to generate a responsive adaptation of its own socio-cultural formation. Respectful Design proposes that cultural innovation through many locally co-designed shifts can create new possibility spaces—spaces where embedded problems are newly identified through fundamental and at times co-designed changes to the cultures of inquiry, innovation, and production.<sup>33</sup>

#### **Respectful Design: Respect as a Beginning**

Respectful Design involves the recognition that Indigenous Knowledge (IK) is a case in point for the wicked problems embedded in modern progress. Although IK is often valued as a source for theorizing about human cognitive origins and as a resource for

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32 Ibid.

33 Richard Buchanan, “Wicked Problems in Design Thinking,” *Design Issues* 8:2 (1992), 5–9; E. Jeffery Conklin, “Wicked Problems and Social Complexity,” [http://www.cognexus.org/id26.htm#wicked\\_problems\\_and\\_fragmentation](http://www.cognexus.org/id26.htm#wicked_problems_and_fragmentation) (accessed April 14, 2011); Boyd Hunter, “The Howard Government’s National Emergency in Indigenous Affairs,” *Agenda* 14:3 (2007), 35–7.

product development, it is routinely considered primitive, surpassed, and irrelevant. The origin of this bias can be discerned in the work of the colonial anthropologist, Lewis Spence, who stated that the native mind had no concept of reality because of an inability to distinguish between the animate and the inanimate: "Therefore, the savage imagines every object that surrounds himself to be like himself: instinct with life."<sup>34</sup> For generations, eugenic theory informed colonial practices applied to *aborigines* in Australia, Africa, and the Americas, wherein improvement in the *stock* of humanity and a focus on the commercial value of human life justified implacable actions against these mentally *unfit* and economically *unproductive* others. Vestiges of these assumptions continue embedded in contemporary policy, developmental theory, health research, and societal attitudes.<sup>35</sup>

In a similar way, climate change can be seen as an indicator of an ontological flaw in Western understanding because the supposedly inanimate world/environment is actually responding to human intrusions in ways that are difficult for modern society to grasp. The threatening reality of this view is that modern production-oriented cultures' inability to adjust affirms this ontological flaw as a source of the wicked problems we face. In this critique, Western production-oriented development is described as "scavenger ideology," in which every being and every value eventually is consumed by self-serving production.

In this context IK strives to position Respectful Design where it can intercede as an advocate for a deep equity, where all social and natural systems are seen as equally alive, related, and interdependent. IK continues to present environmental devastation, human rights violations, and health inequity as ontological issues caused by flawed conceptions of being. Respectful Design is informed by the view that respect is a fundamental refuge, and an essential non-violating weapon, in a continuing battle for the well-being of us all.<sup>36</sup>

In Australian Aboriginal contexts, research is traditionally conducted through visual images and narratives, which provides a 60,000-year history of inquiry behind this approach to knowledge. Design and visual techniques work well in research because these processes embody and practically play out the evidence-based principles of Respectful Design already described. In our meetings of the Faculty of Design at Swinburne University, Professor Frank Fisher called for a new lens through which we might see the way to sustainable futures. Respectful Design may show that we already have the lens because the thing we most need to analyze and adjust is our own cultural assumptions. Design is a constant socio-cultural mirror that IK seeks to reposition so that we might shift our view of ourselves to one where the pressing necessity that we design-with natural systems becomes visible.

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34 Lewis Spence, *North American Indians*, (London: Bracken Books, 1992), 80.

35 Angela C. Wilson, "Reclaiming Our Humanity; Decolonisation and the Recovery of Indigenous Knowledge," in *War and Border Crossings: Ethics Where Cultures Clash*, ed. Peter A. French and Jason A. Short (Oxford: Rowman and Littlefield Publishers, 2005), 255–8; Emily Jane Wilson, *Eugenic Ideology and Racial Fitness in Queensland, 1900–1950* (St. Lucia, Queensland: University of Queensland Press, 2003), 9–23.

36 George M. Fredrickson, *Racism: A Short History* (Princeton: Princeton University Press, 2002), 139–50; James R. Cochrane, "The Epistemic Violence of Racism: Hidden Transcripts of Whiteness," (South Africa: University of Cape Town Research Institute on Christianity, 2002), [http://www.chora-strangers.org/files/chora/cochrane\\_2002b.pdf](http://www.chora-strangers.org/files/chora/cochrane_2002b.pdf) (accessed April 14 2011); Pranee Liamputtong, *Researching the Vulnerable* (London: Sage, 2007), 3–9.