Ethnography as transdisciplinary inquiry: two stories of adaptation and resilience from Aceh, Indonesia

Dr Jane Palmer
Vice-Chancellor's Research Fellow (Community Futures)
Institute for Resilient Regions,
University of Southern Queensland
Toowoomba QLD 4350 Australia
jane.palmer@usq.edu.au

Introduction

The special qualities of transdisciplinarity, including its potential for integrative inquiry and emergent solutions, its engagement with community and other non-academic knowledges, and the breadth of its outcomes for researchers, participants and the wider community, are all qualities of what I will call here *storytelling ethnography*. Ethnography more generally is defined as the process of finding out about how people live 'in their own words', that is, as told from the 'inside' rather than from the observer's perspective (Hall 2010). Much of the data gathered in ethnographies appears in the form of stories told by members of a community, and researchers use a range of methods (narratological, interpretive, clustering by themes) to analyse them. The case study in this chapter, within the research field of resilience and adaptation, illuminates the special qualities of stories and why storytelling ethnography is both a model and a tool for transdisciplinary research as understood by diverse theorists and practitioners. The chapter emphasises that a story is not only 'data', but a vehicle for making new connections and transcending disciplinary boundaries, and then for communicating these new understandings to a wide audience within and outside the academy:

We tell stories because in the last analysis human lives need and merit being narrated ... The whole history of suffering cries out for vengeance and calls for narrative (Ricoeur 1984, 74).

The chapter concludes with some useful tools for the effective gathering, interpretation and representation of stories, which point again to a convergence between good transdisciplinary research and good storytelling ethnography.

Stories, storytelling and transdisciplinary research

Transdisciplinarity has integrative and transformative qualities that multidisciplinarity does not. It opens up a new discursive space where hybrid solutions and analyses are possible (Reich et al. 2006); it is 'an *integrative* process ... that *synthesizes* and *extends* discipline-specific theories, concepts, methods' (Bammer 2012, citing Stokols 2006). In this chapter, transdisciplinarity is taken to be characterized by such synthesis and hybridity, and hence transcendence; moreover it is argued that these characteristics are exactly what is provided

through storytelling. Stories can integrate knowledge from realms as diverse as history, geography, sociology, anthropology, psychology and medicine, to produce an understanding beyond any discipline-based or multi-disciplinary exegesis.

Another mark of transdisciplinary research is its acknowledgement that specialized disciplinary knowledge always already intersects with a range of non-academic knowledges, especially where there are diverse stakeholders involved in the problems it addresses (Funtowicz et al. 1993). It works at the border between academic inquiry, 'the sphere of tacit and experiential knowledges' (Horlick-Jones et al. 2004, 445) and community and traditional knowledges (Sillitoe 2004, 20). The power of stories lies in their capacity to act as bridges between these different knowledges and stakeholders, as the vehicle for the storyteller's experience, as scholarly data and synthesiser, and as the means of conveying new understanding to diverse audiences. In performing this role, the two stories in this chapter ask us to look at resilience and vulnerability anew; they show us, more clearly than theory and as forcefully as any advocate, how both proximate and deeper factors interact and accumulate at the site of a particular life. The stories do not this through a formal act of synthesis by the storyteller; rather, they 'model the course of the world' (Benjamin 1936, 95) – in this case the collision between the idea of resilience and circumstances unfolding at the site of a life – while also providing its evocative and convincing representation.

There are other connections between storytelling and transdisciplinarity. The particular kinds of outcomes that are a mark of transdisciplinary research are described elsewhere in this volume (Mitchell et al. Chapter 3), and include: an improvement in the 'situation' being addressed; the generation of new and accessible knowledges; and transformational learning of all participants. Stories can be used by both researchers and their project participants to create change in all of these outcome spaces. In the 'situation' area that is the focus of this chapter – resilience and adaptation – stories can provide us with a clearer picture not only of the multifactorial, cumulative past that has led to current conditions, but also of potential alternative futures not envisaged in standard projections of 'possibilities'. As the second story below demonstrates, the insights provided by storytelling can prevent interventions that will have negative impacts on communities, and support those that the community wants and needs.

The transformative impacts on both storyteller and researcher are explored later in this chapter, but it is worth noting here that new knowledge, as well as improvements in the 'situation', only occur when a researcher is committed to the listening process and shows respect for what may be historically uneventful, the debris that has fallen 'between the cracks of knowledge' (Carter 2004, 70). Such attention and respect produces the relationship that underlies the story's potential to create change in the world. The normative aspects of transdisciplinarity – the social justice and sustainability agendas of many of its practitioners (see Klein Chapter 2, this volume) – require researchers to transgress not only disciplinary frameworks but existing conceptualizations of the world that have marginalized certain kinds of knowledge, both human and non-human (Smith 1999; van Dooren et al. 2012; Tsing

2014). To reconceptualize the world in this way involves an ethical and epistemological transformation; the case study below indicates one way of achieving such a transformation. Stories offer more than connectivity, transcendence and transformation however; Tom Griffiths describes the story as 'a privileged carrier of truth, a way of allowing for multiplicity and complexity at the same time as guaranteeing memorability' (Griffiths 2007, 4). Stories offer 'new and accessible knowledges' by carrying their synthesis and meaning with a force that is recognized by researchers, teachers, community members, and all generations and all cultures.

Below I look first at current critical discourses of resilience, vulnerability and adaptation within a social justice framework, then at storytelling ethnography as a practice that cuts across such discourse to speak to researchers, practitioners and communities about inequitable resilience and subversive futures as they become visible at the site of a storyteller's life.

Vulnerability, resilience and adaptation: the social justice discourse

Resilience bears, conceptually and politically, a close relationship to the ideas of vulnerability and adaptation, since vulnerability is perceived as having an inverse relationship with a person's ability to cope or ability to adapt to adverse events (Moser et al. 2008, 5-6). Such definitions have been criticized however as disempowering, and as encouraging a sense of whole communities or people as 'weak, passive and pathetic' (Bankoff 2001, 29). Rather than endemic to a particular region or population, vulnerability is increasingly seen as a product of complex historical, political and economic processes that manifest as poverty, depleted resources or marginalization (Adger et al. 2009; Bankoff 2010; Howitt et al. 2010). While vulnerability is influenced by variables such as age, gender, ethnicity and disability (Morioka 2012, vi), or a lack of assets (Moser 2011, 232), the identification of such variables 'does not provide a root-causal analytic' (Ribot 2014, 679).

Related arguments have been made about the idea of adaptation, defined most broadly as. 'adjustments made to changed ... circumstances' (Adger et al. 2009, 337). Socially just climate change adaptation strategies call for an examination of the relationships between those who are vulnerable and other key actors, and of regulatory and policy constraints. Moreover they involve responses that do not focus solely on the *additional* stresses caused by climate change (Ribot 2014, 672) but aim for 'more-than-adaptation' (Instone et al. 2013). Fundamental in this expanded approach is the belief that, for many, 'everyday conditions are unacceptable even in the absence of climate stress' (Ribot 2010, 50) and that many such lives are already a 'permanent emergency' (Bankoff 2001, 25).

Integral to the process of identifying and resolving multi-stranded vulnerability is the participation of those most at risk (Bankoff 2001, 30). It is they who are best able to describe multi-stranded disadvantage in their lives and communities, and identify potential solutions (Ribot 2010). As we see in the case study below, an effective way of understanding multi-stranded, multi-scale causes, and the ways they interact and manifest in real life, is through

listening to the stories people tell about their lives. As well as transcending disciplines to integrate multiple factors at multiple scales, stories 'model' what is obscured in other forms of information and inquiry: the *cumulative* quality of experience, and the events or changes that have been most *significant* to the storyteller (Palmer 2011). While some work has been done on the cumulative effects of change (Mitchell et al. 2011; Smith et al. 2013), the value of stories in modelling these impacts at the scale of a lifetime is largely unexplored.

Case study: two stories from Aceh

Any story worth telling arrests our ordinary processes of thought, drawing us up short for at least a moment ... It asks us to begin again, rethinking or remembering our perspectives through the images, sounds, or feelings of the story (Tsing 1999, 4).

The stories I use as examples here come from my fieldwork in Aceh, Indonesia, where I interviewed 25 older people about their life histories. The issue of story representation by researchers is discussed later in the chapter; however it is important to note that each story is the outcome of a unique set of events – a mutually choreographed interaction between storyteller and listener that is then transcribed, translated, contextualized and presented, usually in edited form, to others. The first story below is presented within the frame of my own story, while the second is a series of excerpts from an interview transcript. However both modes of representation seek 'truthfully to convey' (Wyschogrod 1998, 4) some part of the life story of the storyteller.

During the whole of the twentieth century, Aceh was a place of occupation by foreign powers and decades of civil unrest including the Tjoembok rebellion, the Darul Islam rebellion, the anti-Communist purges of 1965-66, and the 30-year conflict between the Indonesian military and the Free Aceh Movement that ended in 2005. Jesse Grayman's study of the impacts of this latter conflict found that while 'statistics provide clear evidence of the magnitude of suffering and terror experienced in these communities ... [the] interviews have emotional and testimonial qualities that numbers cannot measure (Grayman et al. 2009, 297, 310-311).

The tsunami that struck Aceh on Boxing Day 2004 killed 170,000 Acehnese people, while also speeding up the peace process that formally ended the 30-year conflict. Chronic trauma, grief and a prolonged absence of government investment have had lasting impacts on the Acehnese people (Good et al. 2007; Shea et al. 2008; Grayman et al. 2009). Both of the stories below emerge from this history and each tells us something new about resilience.

All quotes in the stories are taken from the original interview transcripts.

Story 1: Re-thinking resilience

We enter from the bright light of the street to find Ibu H sitting by herself, crosslegged on a mat. She doesn't rise to greet us, and her eyes are unfocused, but she

smiles and asks us to sit. We tell her about the research project and although her reply is vague and exhausted, she wants us to stay. We ask about her childhood.

'No my dear, I didn't go to school. Sometimes I was looking for shrimp in the river. Sometimes I made salt, then I had to look for tree branches for the fire, then I cooked the salt'. She explains about the salt-making. 'It is very hard; I carry a big bucket of water, put it in the frying pan, and cook it until it becomes the salt grain. It needs a lot of strength'.

'But long ago, when my children were very young, my husband passed away and I lost the salt factory'. We never learn why she lost the salt factory. Only 'it was long before tsunami happened. I was getting weak. Then I started to look for shrimp in the river'.

Sometimes she had enough shrimp to sell, sometimes just enough for the family. Later, I'll remember her telling us how she used her hands, sitting in the shallow water and rubbing the sand through her fingers. 'When I got older, I couldn't do it anymore dear'.

Her children work but she spends most of her time at home. 'I don't go anywhere so I don't meet anyone. My children take care of me, you know, my two children'.

The tsunami destroyed her house, leaving empty land. We ask her when this new house was built, but that's also been lost. 'I don't remember that anymore dear. I didn't pay attention, I don't know, because my heart wasn't there'.

Her voice has become weaker, her eyes half close and she starts rapidly uttering prayers for our long life and happiness. We withdraw quietly out into the sunlight, where another woman says to us: 'She's not well. Her children do not take good care of her'.

Weeks later at a noisy dinner in Banda Aceh, I'm sitting beside an aid worker who tells me about a creeping illness that comes to women who work in the river, immersed up to the waist for hours at a time. I remember Ibu carrying branches and buckets of water, becoming weaker, until her salt factory is no longer there; now walking into the river to look for shrimp, with the sickness waiting beneath. But maybe, after the back-breaking work of making salt, it's a blessing to be sitting in the cool water sifting sand.

Resilience is commonly viewed as an 'ability to face a crisis, capacity to adapt, to respond, to go back to an equilibrium' (Reghezza-Zitt et al. 2012, 8). Ibu H is, under many definitions, resilient. She made plans to economically diversify, she acquired new skills, she adapted to her circumstances. All that is wrong with that description emerges not from fragmenting her

story into themes of 'livelihood', 'adaptation,' 'ageing' or 'tsunami', nor from triangulating to find out whether her facts are correct, or assessing her as a vague and hence unreliable 'witness'; it emerges from looking at her story as a whole. Her story connects the ideas of resilience and justice in new ways. Rather than describing the deep historical socio-political causes of her current condition, the story tells us how these have played out at one particular site, that of Ibu H's life, where causes interact with one another in complex ways, and are cumulative. It is a story of 'invisible loss' (Turner et al. 2008), a cumulative process described as typifying many indigenous communities in the world, where one more intervention from outside (for example by a climate adaptation expert) could easily be devastating. The story makes visible the combined impacts of the early death of a spouse and precarious family arrangements, of poor healthcare, of the loss of livelihood and independence, of high levels of occupational hazard, and of natural disaster. In so doing, it models, without explicitly stating, the social justice limitations of exhortations to be resilient. Aligning with the objectives of transdisciplinary inquiry, this story within a story carries impact and meaning that integrates knowledge from diverse realms and disciplines into a fresh understanding.

Story 2: A story of the past and the (subversive) future

Ibu A is a 90-year-old woman who lived through most of the historic events in Aceh over the past century, including the forced relocation of her village three times due to sea level rise:

[My parents] worked as farmers; they went to the mountain, breaking the rocks, finding rattan, it was very sad in that time [the time of the Dutch]. That's the only work that the villagers can do, they tried to plant crops, but the result was not satisfying.

[Y]ou see there's a river, I lived across the river. There was a village there before...you know, in the time of the Japanese war...when they occupied this place. After that, we moved to this place. When the Japanese came, they came from the sea. I was in the field, then they released shots, People died and fell down in the ground ... Oh dear, the Japanese time was very bitter, don't know how to say it. Then when we moved here, our previous village little by little was gone because the sea level rises, little by little until it is totally gone.

After the Japanese left ... I worked making salt. We worked by ourselves, everyone cooked their own salt. Not anymore, there is no more place, the river has gone. The earthquake of 1936 was a hard one too, the sea level rise, but unlike the recent tsunami.

Can you tell us what happened during the tsunami? How can I forget, my daughter, tsunami happened like yesterday...I still remember. I feel like I couldn't go to the mountain, but I have to. I lost 9 of my family - 7 grandchildren, plus their mother, and one baby born. We couldn't find their bodies. Even the

trees were destroyed. ... All the houses were swept away, nothing was left. After we stayed in the mountain for two days, we moved to other people's village...we stayed there for two months, and then we were moved to refugee barrack for two years...

I had high-blood pressure when I was in the barrack after the tsunami, then I was hospitalized. After that, I stopped doing many things. Other old people may go to the mountain and work, but me, I can't even see clearly now. I can't even wake up for prayer when I feel weak.

The youngsters now, I pray to God that they must live better; they must not feel what we've been through in the past... I don't know where we will move after this ... heaven! There's nowhere else to go beside to God.

Ibu finished her story by saying: 'But I love this village, no matter what ... this is my home, I was born here. This is my place.'

This story weaves together facts about environmental change, the role of faith and attachment to place, in showing us the resilience of people and a village that has been forced to move three times in the last century. It interconnects the physiological impacts of the 2004 tsunami – Ibu's high blood pressure and permanent loss of strength – and the loss of river water for making salt, resulting in loss of livelihood. It shows us that old Acehnese generally do work and want to work, a fact not realized by many NGOs, with the exception of HelpAge International. It points to sources and degrees of trauma – Ibu was able to talk about the tsunami, but her memories of the Japanese occupation, like those of many others, were still clear and extremely painful; it was common for people to say 'I don't know how to say it', or 'I have no words to describe it'.

As discussed elsewhere (Palmer 2014), Ibu A's story offers a glimpse not only into the past but into the future, a signal of a community-wide phenomenon that subverted official plans for post-tsunami reconstruction. The government's blueprint identified an exclusion zone two kilometres wide along the coast where reconstruction was prohibited. However 'the behaviour of the victims went against the preconceptions of the planners – continuously and systematically' (Dercon et al. 2007, 11), as people petitioned the government to return to their villages and re-build on their own land. The seeds of this alternative future can be seen in Ibu A's story: a record of many disasters already weathered, and a love of the village that didn't factor in official planning. As a result of the villagers' petition, they were permitted to return and rebuild within the exclusion zone, the government blueprint abandoned for 'lack of specificity and realism' (Dercon et al. 2007, 7). An early and rapid ethnography of the tsunami-affected villagers may have produced a very different and more realistic blueprint.

Supporting resilience and adaptation requires an understanding of complex issues weighted by history, economic stress, natural disaster, cultural difference and political indifference. The stories above give us a different way of thinking about the cumulative and integrated nature of experience, and what this might mean for multi-stranded and integrated approaches to supporting resilience and justice. Both stories draw attention to the value of stories for transdisciplinary research; they provide insights that fall across the realms of anthropology, history, psychology, sociology and medicine, and trace the past and potential futures in a way that transcends discipline-based inquiry; they help us to make sense of time and complexity at the scale of a community or an individual's life, in a form that 'carries multiple causes along together, it *enacts connectivity*' (Griffiths 2007, emphasis added). Most importantly, they ask us – researchers, practitioners and community members – to reconsider our ideas about resilience, adaptation and vulnerability and to ask ourselves 'What is just?' and 'Who is listened to?'

Stories as transformative

To bear witness is not a passive act. It's an act of consequence that leads to consciousness. It matters (Terry Tempest Williams in Fredericksen 2013).

What storytellers and their partners are doing in conversational storytelling transpires on at least two levels of interest: the level of their interaction in the here-and-now and the level of the story – the then-and-there (Pasupathi 2006, 136).

In the first story, it can be seen that Ibu H is aware of her listeners: she addresses them as 'my dear', acknowledges them in the apologetic 'I didn't pay attention'. At the end, she prays for us. Ibu A engages her listeners through reflective/comparative observations (Pasupathi 2006, 133) such as 'The earthquake of 1936 was a hard one too, the sea level rise, but unlike the recent tsunami,' and through 'coda' (Labov et al. 1997 (1967), 36) that bring the teller and listener back to the present: 'I don't know where we will move after this ... heaven!' These are comments that Gee (1991, 29) describes as 'off line', suspensions of the narrative that are made in order to guide the listener's interpretation or understanding; Ibu A for example also provides orientation information to provide the unfamiliar listener with additional context (Labov 1997, 402): 'You see there's a river, I lived across the river. There was a village there before.' For her, as for Ibu H, the story is not simply a method of conveying content, but an *engagement* with a particular listener in the event of storytelling.

Stories are a way to *share* experience, knowledge and culture across communities, generations and between any teller and listener. In the case of those who have lived through traumatic or difficult histories, such as the old people of Aceh, Shoshona Felman (1992, 204) argues for the relational nature of storytelling: '[m]emory is conjured ... essentially in order to *address* another, to impress upon a listener, to *appeal* to a community.'

Storytelling is thus an intervention that changes the relationship between teller and listener (Portelli 2003; Hirsch et al. 2009). In listening to the life stories of old people in Aceh, I was struck by their comments that no-one had ever asked to hear their stories. Jeremy Seabrook notes a study by HelpAge International in Vietnam, in which '[o]lder people said that their

children did look after them, but do not know, and never ask, what they are thinking' (2003, 157). The people I spoke with had been given an opportunity to tell their stories in spite of the old age that had marginalized them post-conflict (Good et al. 2007, 5) and post-disaster (HelpAge International 2005); they responded with a surprising willingness to share even at some physical and emotional cost to themselves. At least temporarily, I and my interlocutors were united in wanting to elicit a story that was important to both of us.

Moreover, the storytelling methods employed by Ibu H and Ibu A produce empathy, and hence have the potential to transform a listener into what Richard Slaughter has described as an 'involved self' (1995, 141). Involved researchers may become advocates or activists, so that '[r]ather than engaging to further our writing, we would write, if necessary, to further our engagement' (Enslin 1994, 558). The transformative impacts of storytelling on the listener occur at many levels, and resonate over time. The stories I was told in Aceh have influenced the academic and consultancy projects I have since chosen to work on, because the value of stories in understanding a community and culture, as well as the requisite theoretical knowledge and methodological skills, are reinforced through such an experience. It has given me an ongoing interest in Indonesian political, social and economic issues, and in maintaining basic language skills in Bahasa Indonesia. It has enabled me to understand the complex historical, cultural and socioeconomic factors in community suffering, and expressions of that suffering, brought about by political crises or natural disasters. I will continue to transmit the stories to a wider audience as effectively and as truthfully as I can.

Some tools for ethnographic engagement with communities

In considering the use of storytelling ethnography in community-engaged research, the following are offered as useful tools learned from the author's experience and from the work of others.

Ethics

This includes firstly an acknowledgement of each story as a unique act of commitment and 'transmission' (Portelli 2003, 70) from storyteller to listener; and secondly, to adapt the words of historiographer Edith Wyschogrod, that the researcher be committed 'truthfully to convey' some aspect of that story (1998, 4). Such responsibilities and commitments, as much as any dissection of text or theoretical framing, are essential elements of interpretive methodology.

Reflexivity

The ethnographer who works and lives in a community finds that their research and identity become closely tied (Chapkis 2010, 494). Glimpses of other realities can, as Maclean (2007) suggests, cast a reflexive light onto the researcher's own understanding of the world. Stories of courage and resilience in response to misfortune or disadvantage can also 'sustain both the subjects of our research and the researchers who do it' (Chapkis 2010, 495).

In research on resilience and adaptation, it is only by remaining reflexive, nonjudgmental, open to learning and able to question our own reactions (Maclean 2007) that we might gain new insights into the ways resilience, vulnerability and wellbeing are constituted differently across different communities.

Analysis and interpretation

The 'data' that emerges from a storytelling event is a reflection of a particular moment in time, not replicable for later verification or 'triangulation'. Denzin points out that data 'speak up, get rowdy, act up, resist being turned into commodities, produced by researchers' (2013, 2); the voice of the storyteller will often speak across the categories and theories to which it is assigned.

Tools available for interpretation and analysis that resist quantification and verification include the use of interpretive theory (Marxist, feminist or postcolonial for example) to explore the social or political meaning of the stories (St Pierre 2013, 2), and narrative analysis to understand *how* a story carries its meaning and conveys complex understandings. Rather than a literary evaluation of plot line or characterization, narrative analysis may simply be a response to the question: 'Why was the story told *that* way? (Riessman 1993, 2). Interpretive analysis critically situates the story and the storyteller, and our relationship with both, in the wider world. Both require a focus on the whole story rather than the coded fragments provided in much social science.

It is important also to be open to different kinds of 'story'; a life story, especially of a traumatic past, may not be a linear narrative but one that 'leaps from incident to incident in a jagged array of nauseating tableaux' (Ganguly 2009, 439).

Writing ethnography

Researchers themselves have authorial responsibilities as they re-tell a story to a wider audience, when it may become also a story about the researcher as witness and listener. Sometimes the most effective way to convey and reflect upon a story is to embed it in another, as in the first story above. More creative research outputs present stories that are multi-vocal, more nuanced (Curthoys et al. 2010, 204; Williams 2013), and that work by 'evoking' rather than by linear argument (Tyler 1986). There are many examples of evocative, transdisciplinary writing in the environmental humanities that relate to adaptation and human-nonhuman relations (for example van Dooren et al. 2012; Tsing 2014).

Engagement with community resulting from ethnographic work may produce research outputs co-authored by academics and non-academics. As engagement deepens, researchers may become activists who need to communicate effectively to all stakeholders (Mackie 2013, 298); the publication of peer-reviewed journal papers becomes less important than the 'adisciplinary' work of producing 'grey' or 'popular' literature for non-academic audiences (Giacomini 2004 181).

Rapid Ethnographic Assessment Methods

Ethnography is generally seen as requiring a long-term immersion in another culture or community, and hence may be seen as outside the reach of projects seeking urgent change. However Rapid Ethnographic Assessment Methods (REAMs) can be completed in a few weeks, and are currently used in post-disaster situations and in communities trying to urgently resolve social problems such as health epidemics or crime (EPC et al. 2004; McNall et al. 2007).

REAMs, designed in consultation with anthropologists or ethnographers, enable community values and cultural perspectives to continually inform the design of projects (Harris et al. 1997; McNall et al. 2007). They offer an accessible method for using storytelling ethnography as part of a transdisciplinary research project.

Conclusion

[W]hen we downcast our eyes to the 'dirt and rocks', at least we have the place – the only place – where social things happen, things that are contingent, fragmented and changeable (Marston et al. 2005, 427).

In its layering of multiple and cumulative factors and in its levels of impact – on knowledge, on researcher and storyteller, and on community futures – storytelling ethnography shares a morphology with the kind of transdisciplinary inquiry defined at the beginning of this chapter. Stories offer adaptation and social impact researchers the kind of knowledge they have been seeking: more 'historical, descriptive and democratic accounts of thresholds and limits' (Mitchell et al. 2011: 29). They have the potential to enrich transdisciplinary research in areas such as climate adaptation, health and wellbeing, economic development, land use planning and post-disaster reconstruction. The stories told by Ibu A's community transformed its future; the outcome of the stories told in this chapter may take time to be realized, through different approaches to post-disaster or post-conflict reconstruction, or to climate adaptation. I have described the outcomes that are already evident in my own work as a transdisciplinary researcher.

For transdisciplinary researchers to become effective storytelling ethnographers, they need to maintain ethical awareness and reflexivity, acquire appropriate interpretive tools, and engage in more creative research writing to convey complexity. Reflexivity, creativity and the capacity to interpret and make connections across and beyond disciplines are already acknowledged as qualities of a good transdisciplinary researcher (Fam et al. Chapter 6, this volume). Storytelling ethnography can further enable such researchers to think and act differently within and outside the academy, and to work with their project participants to create more responsive and socially just changes in the world.

References

Adger W.N., Dessai S., Goulden M., Hulme M., Lorenzoni I., Nelson D.R., Naess L.O., Wolf J. and Wreford A. (2009) 'Are there social limits to adaptation to climate change?' *Climatic Change 93 3-4 335-354*

Bammer G. (2012) Strengthening interdisciplinary research: what it is, what it does, how it does it and how it is supported Australian Council of Learned Academies, Melbourne

Bankoff G. (2001) 'Rendering the world unsafe: "vulnerability" as Western discourse' *Disasters 25 1 19-35*

Bankoff G. (2010) 'No such thing as natural disasters' *Harvard International Review* (http://hir.harvard.edu/no-such-thing-as-natural-disasters?page=0,0) Accessed 16 March 2012

Benjamin W. (1936) 'The storyteller: reflections on the works of Nikolai Leskov' in Arendt H ed *Illuminations* Trans. Zohn H Fontana, London *83-107*

Carter P. (2004) *Material thinking: the theory and practice of creative research* Melbourne University Press, Melbourne

Chapkis W. (2010) 'Productive tensions: ethnographic engagement, complexity, and contradiction' *Journal of Contemporary Ethnography 39 5 483-497*

Curthoys A. and Docker J. (2010) *Is history fiction?* University of New South Wales Press Ltd., Sydney

Denzin N.K. (2013) 'The death of data?' *Cultural Studies*<=>*Critical Methodologies* 13 4 353-356 doi:10.1177/1532708613487882

Enslin E. (1994) 'Beyond writing: Feminist practice and the limitations of ethnography' *Cultural Anthropology 9 4 537-568*

EPC and TCG International (2004) *Participatory planning guide for post-disaster reconstruction* Environmental Planning Collaborative and TCG International, Ahmedabad, India and Washington, DC (www.tcgillc.com/tcgidocs/TCGI%20Disaster%20Guide.pdf) Accessed 23 September 2011

Felman S. and Laub D. (1992) *Testimony: crises of witnessing in literature, psychoanalysis and history* Routledge, New York

Fredericksen D. (2013) 'Ground truthing: interview with Terry Tempest Williams' *Guernica* 1 August New York (https://www.guernicamag.com/interviews/ground-truthing/) Accessed 2 September 2015

Funtowicz S.O. and Ravetz J.R. (1993) 'Science for the post-normal age' *Futures 25 7 739-755*

Ganguly D. (2009) 'Pain, personhood and the collective: Dalit life narratives' *Asian Studies Review 33 4 429-442*

Gee J.P. (1991) 'A linguistic approach to narrative' *Journal of Narrative and Life History 1 1* 15-39

Giacomini M. (2004) 'Interdisciplinarity in health services research: dreams and nightmares, maladies and remedies' *Journal of Health Services Research and Policy 9 3 177-183*

Good M.-J.D., Good B., Grayman J. and Lakoma. M. (2007) A psychosocial needs assessment of communities in 14 conflict-affected districts in Aceh International Organization for Migration, Banda Aceh, Indonesia

Griffiths T. (2007) 'The humanities and an environmentally sustainable Australia' Australian *Humanities Review 43* (http://www.australianhumanitiesreview.org/archive/Issue-December-2007/EcoHumanities/EcoGriffiths.html) Accessed 10 December 2013

Hall B. (2010) *How to do ethnographic research: a simplified guide* Public Interest Anthropology at the University of Pennsylvania (http://www.sas.upenn.edu/anthro/anthro/cpiamethods) Accessed 6 August 2010

Harris K.J., Jerome N.W. and Fawcett S.B. (1997) 'Rapid assessment procedures: A review and critique' *Human Organization 56 3 (Commentary) 375-377*

HelpAge International (2005) *Older people in disasters and humanitarian crises: guidelines for best practice* HelpAge International, London (http://www.helpage.org/download/4c4c9487cd176) Accessed 18 May 2016

Hirsch M. and Spitzer L. (2009) 'The witness in the archive: Holocaust Studies/Memory Studies' *Memory Studies 2 2 151-170*

Horlick-Jones T. and Sime J. (2004) 'Living in the border: knowledge, risk and transdisciplinarity' *Futures 36 441-456*

Howitt R., Havnen O. and Veland S. (2010) 'Natural and unnatural disasters: responding with respect for Indigenous rights and knowledges' *Paper presented to the Conference on Indigenous Reconstruction and Autonomy after Disaster* Taipei 11-13 November

Instone L., Mee K., Palmer J., Williams M. and Vaughan N. (2013) Climate *change adaptation and the rental sector* National Climate Change Adaptation Research Facility, Gold Coast, Australia (http://www.nccarf.edu.au/publications/climate-change-adaptation-rental-sector) Accessed 1 May 2013

Labov W. (1997) 'Some further steps in narrative analysis' *Journal of Narrative and Life History 7 1-4 395-415*

Labov W. and Waletzky J. (1997 (1967)) 'Narrative analysis: Oral versions of personal experience' *Journal of Narrative and Life History 7 1-4 3-38*

Mackie V. (2013) 'Introduction: ways of knowing about human rights in Asia' *Asian Studies Review 37 3 293-301*

Maclean K. (2007) 'Translation in cross-cultural research: an example from Bolivia' *Development in Practice 17 6 784-790*

Marston S.A., Jones III J.P. and Woodward K. (2005) 'Human geography without scale' *Transactions of the Institute of British Geographers 30 416-432*

McNall M. and Foster-Fishman P.G. (2007) 'Methods of rapid evaluation, assessment, and appraisal' *American Journal of Evaluation 28 2 151-168*

Mitchell R.E. and Parkins J.R. (2011) 'The challenge of developing social indicators for Cumulative Effects Assessment and land use planning' *Ecology and Society 16 2* (http://www.ecologyandsociety.org/vol16/iss2/art29/) Accessed 28 March 2013

Morioka K. (2012) A climate for change: understanding women's vulnerabilty and adaptive capacity to climate change from ActionAid's rights-based approach – case studies from Papua New Guinea and Solomon Islands ActionAid Australia, Sydney

Moser C. (2011) 'Climate change adaptation: finding the right response' in Adaptation Knowledge Platform (AKP) AIT-UNEP RRC.AP, Bangkok

Moser C. and Satterthwaite D. (2008) *Towards pro-poor adaptation to climate change in the urban centres of low- and middle-income countries* International Institute for Environment and Development, IIED, London, (http://www.iied.org/pubs/display.php?o=10564IIED) Accessed 12 March 2012

Palmer J. (2011) An eye open in the dark: life story ethnography and the future of social-ecological systems Unpublished Doctor of Philosophy thesis, Institute for Sustainable Futures, University of Technology Sydney (https://opus.lib.uts.edu.au/research/handle/10453/21893) Accessed 31 July 2014

Palmer J. (2014) 'Past remarkable: Using life stories to trace alternative futures' *Futures 64* 29-37 (http://dx.doi.org/10.1016/j.futures.2014.10.002)

Pasupathi M. (2006) 'Silk from sow's ears: collaborative construction of everyday selves in everyday stories' in McAdams D, Josselson R and Leiblich A eds, *Identity and story:* Creating self in narrative American Psychological Association, Washington, DC 129-150

Portelli A. (2003) 'What makes oral history different' in Perks R and Thomson A eds, *The oral history reader* Routledge, London 63-74

Reghezza-Zitt M., Rufat S., Djament-Tran G., Le Blanc A. and Lhomme S. (2012) 'What resilience is not: Uses and abuses' *Cybergeo: European Journal of Geography 621 1-30*

Reich S.M. and Reich J.A. (2006) 'Cultural competence in interdisciplinary collaborations: A method for respecting diversity in research relationships' *American Journal of Community Psychology 38 51-62*

Ribot J. (2010) 'Vulnerability does not fall from the sky: toward multiscale, pro-poor climate policy' in Mearns R and Norton A eds, *Social dimensions of climate change: equity and vulnerability in a warming world* World Bank, Washington 47-74 (http://issuu.com/world.bank.publications/docs/9780821378878/2?mode=a_p) Accessed 9 March 2012

Ribot J. (2014) 'Cause and response: Vulnerability and climate in the Anthropocene *Journal of Peasant Studies 41 5 667-705* doi:10.1080/03066150.2014.894911

Ricoeur P. (1984) Time and narrative University of Chicago Press, Chicago

Riessman C.K. (1993) Narrative analysis Sage Publications, Newbury Park, California

Seabrook J. (2003) A world growing old Pluto Press, London

Sillitoe P. (2004) 'Interdisciplinary experiences: working with indigenous knowledge in development' *Interdisciplinary Science Reviews 29 1 6-23*

Slaughter R.A. (1995) *The foresight principle: cultural recovery in the 21st century* Praeger Publishers, Westport CT

Smith L. (1999) *Decolonising methodologies: research and indigenous peoples* Zed Books, London

Smith T.F., Thomsen D.C., Gould S., Schmitt K. and Schlegel B. (2013) 'Cumulative pressures on sustainable livelihoods: coastal adaptation in the Mekong Delta' *Sustainability 5* 228-241

St Pierre E.A. (2013) 'The appearance of data' *Cultural Studies*<=>*Critical methodologies* 13 4 223-227 doi: 10.1177/1532708613487862

Tsing A. (1999) 'Notes on culture and natural resource management' Working paper (WP99-4) for Berkeley Workshop on Environmental Politics Institute of International Studies, UC Berkeley, California (http://www.escholarship.org/uc/item/92f9h7ct) Accessed 14 January 2010

Tsing A.L. (2014) 'Strathern beyond the human: testimony of a spore' *Theory, Culture and Society doi:* 10.1177/0263276413509114

Turner N.J., Gregory R., Brooks C., Failing L. and Satterfield T. (2008) 'From invisibility to transparency: Identifying the implications' *Ecology and Society 13 2*

(http://www.ecologyandsociety.org/vol13/iss2/art7/) Accessed 14 February 2010

Tyler S.A. (1986) 'Post-modern ethnography: from document of the occult to occult document' in Clifford J and Marcus G E eds, *Writing culture: the poetics and politics of ethnography* University of California Press, Berkeley 122-140

van Dooren T. and Rose D.B. (2012) 'Storied-places in a multispecies city' *Humanimalia: a journal of human/animal interface studies 3 2 1-27*

Williams P. (2013) 'Creative praxis as a form of academic discourse' *New Writing: The International Journal for the Practice and Theory of Creative Writing 10 3 250-260*

Wyschogrod E. (1998) An ethics of remembering: history, heterology and the nameless others University of Chicago Press, Chicago