UNCERTAINTY AND THE EMOTIONAL LANDSCAPE OF DROUGHT

REBECCA JONES

School of History, The Australian National University

Abstract

Drought is the most ubiquitous climatic phenomenon in Australia, and the late nineteenth and early twentieth centuries were decades of particularly frequent and persistent drought in south-eastern Australia. While the financial and environmental cost of drought has been well documented by historians, less attention has been paid to the emotional landscape of drought. These effects share much with other types of environmental adversity; however, droughts are slow catastrophes that generate a particularly profound level of uncertainty.

This paper explores emotional responses to drought from the 1890s to the 1940s as well as some of the ways in which people coped with and attempted to ameliorate these emotions. I argue that drought elicits a wide range of emotions, but that the dominant experience of drought and the source of many of these emotions was uncertainty, provoked by the particularly ambivalent, incremental character of drought. Farmers are, arguably, the group whose well-being depends most directly on climate extremes and are therefore the group upon which I will focus this paper. Personal sources such as diaries and correspondence provide a window into the lived experience of drought and a rich picture of the emotional landscape of settler-colonisers in Australia in the late nineteenth and early twentieth centuries.

Keywords: drought, emotions, uncertainty, agriculture, farming, farmers, diaries, Australia

Introduction

Drought is the most ubiquitous climatic phenomenon in Australia and, due to its latitude and topography south-eastern, Australia has one of the most variable and drought-prone climates in the world.¹ The late nineteenth and early twentieth

¹ Commonwealth Scientific and Industrial Research Organisation (CSIRO), Climate Variability and Change in South-Eastern Australia: A Synthesis of Findings from Phase 1 of the South Eastern Australian Climate Initiative (SEACI) (Canberra: CSIRO Australia, 2010); Paul Holper, Climate Change Science Information Paper: Australian Rainfall—Past, Present and Future (Aspendale, Vic.: CSIRO and Bureau of Meteorology, 2011).

centuries—from the 1890s to the end of the 1940s—was a period of particularly great climate variability in the south-eastern Australian states of New South Wales, Victoria and South Australia, during which five severe droughts occurred. The frequency and recurrence of drought has helped to shape not only the natural but also the cultural environment of Australia. While the financial and environmental cost of drought has been well documented by historians,² less attention has been paid to the emotional cost beyond stoicism and endurance. Andrew Gorman Murray and Kate Darien-Smith have argued that 'rural' in Australia has indeed been defined by stoicism and endurance in hardship.³ The Federation drought of 1895-1902 was arguably the longest, most widespread and most severe drought since the establishment of agriculture and pastoralism in south-eastern Australia, and coincided with economic depression and grave overstocking following decades of relative prosperity. This drought in particular played a particularly important role in forging a national identity of stoicism in the face of hardship. The struggle of the settler against a hostile environment during this time is often compared, by historians, to that of a battle faced by a soldier in war.⁵ Widespread droughts in the 1920s and 1940s, as well as intermittent localised droughts, reinforced the identity of endurance. Deb Anderson's detailed exploration of drought in the Victorian Mallee from the 1980s to the 2000s through oral history emphasises the importance of historical narratives of endurance in coping with the emotional impact of drought today.6 However, more research is required into the nuances of emotional impact and responses to drought.

Histories of emotions more generally emphasise that the expression, reporting, interpretation and even experience of emotions are mediated by the particular social, cultural, temporal (and I would add environmental) milieu in which a person lives. As Thomas Dixon notes, even the concept of an emotion is historically constituted. Emotions are not only things to which people are subjected, but emotional responses themselves create other emotional states, which, in turn, both hinder and facilitate

² Geoffrey Blainey, A Land Half Won (Melbourne: Sun Books, 1983); Michael Cathcart, The Water Dreamers: The Remarkable History of Our Dry Continent (Melbourne: Text Publishing, 2009); Don Garden, Droughts, Floods and Cyclones: El Ninos That Shaped Our Colonial Past (Melbourne: Australian Scholarly Publishing, 2009); Ruth Morgan, Running Out? Water in Western Australia (Perth: UWA Publishing, 2015).

³ Andrew Gorman-Murray, Kate Darian-Smith and Chris Gibson, 'Scaling the Rural: Reflections in Rural Cultural Studies', *Australian Humanities Review* 45 (2008): 37–52.

⁴ Tom Griffiths, 'One Hundred Years of Environmental Crisis', *Rangelands Journal* 23, no. 1 (2001): 5–14, doi.org/10.1071/RJ01010.

⁵ C. E. W. Bean, On the Wool Track (London: Alston Rivers, 1910); Michael McKernan, Drought the Red Marauder (Crows Nest, NSW: Allen & Unwin, 2005), 7.

⁶ Deb Anderson, Endurance: Australian Stories of Drought (Melbourne: CSIRO Publishing, 2014).

⁷ Peter Stearns and Carol Stearns, 'Emotionology: Clarifying the History of Emotions and Emotional Standards', *American Historical Review* 90 (1985): 813–36, doi.org/10.2307/1858841.

⁸ Thomas Dixon, 'Patients and Passions: Languages of Medicine and Emotion, 1789–1850', in *Medicine, Emotion and Disease, 1700–1950*, ed. Fay Bound Alberti (Basingstoke: Palgrave Macmillan, 2006), 22–52, doi.org/10.1057/9780230286030_2.

the way individuals respond and adapt to drought. This paper therefore explores emotional responses to drought in the late nineteenth and early twentieth centuries (1890s to 1940s) as well as some of the ways in which people coped with and attempted to ameliorate these emotions. I argue that drought elicits a wide range of emotions such as anger, fear and hope, but that the dominant experience of drought and the source of many of these emotions was uncertainty, provoked by the particularly ambivalent, incremental character of drought. That uncertainty, in turn, created emotions as equivocal as the drought itself.

Farmers are, arguably, the group whose well-being depends most directly on climate extremes such as drought and are therefore the group upon which I chose to focus my research. In attempting to illuminate the emotional landscape of drought in the late nineteenth and early twentieth centuries, I have sought ways to understand the subjective and intimate experiences of people during drought: an environmental and emotional history akin to that which Tim Hitchcock and Martin Lyons describe as a 'new history from below', which seeks to reveal the thoughts and actions of 'ordinary' individuals. 10 My sources included personal or 'ego' documents that reveal the direct and personal voices and lived experiences of people, and produce a rich picture of their intimate worlds.¹¹ The most useful of these sources have been diaries and correspondence series. Fifteen individual diaries and four series of correspondence have informed this research, although not all are directly cited in this paper. The strength of diaries and correspondence as historical sources is that they draw the reader into the writer's intimate world, providing a portrait of individuals' everyday thoughts and feelings unmediated by hindsight. They are the direct voices of people who lived through drought, rather than reflections mediated by institutions, government or the media. 12

I sought sources written by both women and men and, perhaps predictably, men and women express emotions in different ways in their writings. In the late nineteenth and early twentieth centuries, gender norms made it acceptable, even desirable, for women to write openly and reflect on emotional experiences such as hope, despair, frustration and pleasure, particularly to a private confidant such as a diary,¹³ and

⁹ Giovanna Colombetti and Tom Roberts, 'Extending the Extended Mind: The Case for Extended Affectivity', *Philosophical Studies* 172, no. 5 (2015): 1243–63, doi.org/10.1007/s11098-014-0347-3; W. M. Reddy, *The Navigation of Feeling: A Framework for the History of Emotions* (Cambridge: Cambridge University Press, 2001), doi.org/10.1017/CBO9780511512001.

¹⁰ Tim Hitchcock, 'Review: A New History from Below', *History Workshop Journal* 57, no. 1 (2004): 294–9, doi.org/10.1093/hwj/57.1.294; Martyn Lyons, 'New History from Below: The Writing Culture of Ordinary People in Europe', *History Australia* 7, no. 3 (2010): 59.1–9.

¹¹ Rudolf Dekker, 'Jacques Presser's Heritage: Egodocuments in the Study of History', *Memoria y Civilización* 5 (2002): 13–37.

¹² A fuller discussion and reflection on the use of diaries in understanding drought can be found in Rebecca Jones, *Slow Catastrophes: Living with Drought in Australia* (Melbourne: Monash University Publishing, 2017).

¹³ Katie Holmes, Spaces in Her Day: Australian Women's Diaries of the 1920s and 1930s (Sydney: Allen & Unwin, 1995).

I observed this candour in the sources. By contrast, men's expressions of emotions in the diaries and correspondence were usually understated and ambiguous; they do not always tell us, but show us, through underlining, capitalisation or description of action rather than statements of feelings. For example, William Pearse, a wheat farmer in north-western Victoria from 1892 until the 1940s, evoked intensity of feeling simply by underlining a single word in his diary such as 'ridiculous'. Pearse's restraint is in keeping with the injunctions of polite society in the late nineteenth and early twentieth centuries that required men to show self-control, disciple and composure and to avoid displays of heightened emotion in public.¹⁴

This paper is divided into four sections. First, I will discuss the particular character of drought, followed by an exploration of the emotions that the uncertain character of drought promoted. The third section will explore some efforts made by farmers to ameliorate the emotional impact of drought. To conclude, the final section will explore the role of acceptance of drought amongst farmers of the nineteenth and early twentieth centuries.

1. The particularly uncertain character of drought

Drought is characterised by deep uncertainty. While I am mindful of the different social contexts of past and present, contemporary disaster literature can usefully illuminate uncertainty as an emotional experience. Uncertainty is defined as doubt or lack of confidence in the ability to predict outcomes. ¹⁵ It is a subjective experience: not only is the uncertainty itself experienced differently by people, but what is uncertain for one person may not be so for another in a similar situation, depending on the context. Most environmental uncertainties tend to be either *epistemic* (the lack of certainty derived from incomplete knowledge) or *aleatory* (due to intrinsic variability, diversity or fluctuation). ¹⁶ Uncertainty in drought derives mostly from intrinsic or aleatory factors, as will be discussed below.

Droughts, unlike many other environmental phenomena such as earthquakes, floods and storms, are not events or incidences but absences—a void of rain. 'Beautiful fine day' is a common reprise in diaries and correspondence written by farmers during drought. By definition, droughts are slow: experienced over months and years rather

¹⁴ Linda Young, Middle Class Culture in the Nineteenth Century: America, Australia, Britain (Basingstoke: Palgrave Macmillan, 2002).

¹⁵ Walid A. Afifi, Erika D. Felix and Tamara Afifi, 'The Impact of Uncertainty and Communal Coping on Mental Health Following Natural Disasters', *Anxiety, Stress and Coping* 25, no. 3 (2012): 329–47, doi.org/10.1080/10615806.2011.603048.

¹⁶ Victoria Sword-Daniels, Christine Eriksen, Emma Hudson-Doyle, Ryan Alaniz, Carolina Adler, Todd Schenk and Suzanne Vallance, 'Embodied Uncertainty: Living with Complexity and Natural Hazards', *Journal of Risk Research* 19 (2016): 1–18.

than days and weeks. The Federation drought lasted for seven years from 1895 to 1902 and the Millennium drought for between eight and 10 years (depending on location) from the mid-1990s to the mid-2000s. Definitions of drought vary between nations—in Australia, a drought is defined as a deficit of rain over 30 per cent below the mean over at least three months, and droughts are 'declared' according to hydrological, social and political as well as meteorological conditions. Therefore, the beginning and end of a drought is uncertain and will likely differ between regions and even locales. Unlike many other environmental disasters such as floods, fires and cyclones, droughts lack an obvious ignition point. They arrive stealthily with little warning. Indeed, enshrined in the definition of drought is that only in retrospect can we identify its commencement, when the cumulative effect of the absence of rain reaches a certain point. It is not until water and vegetation are diminished that the impact of drought is felt, and only with hindsight can the anomaly be identified. Gradually, as the rainfall becomes more infrequent, the grass browns and the dams retreat, we look back and realise that a drought has begun.

The ending of a drought is as indistinct as the beginning, with no clear demarcation of its conclusion. Drought lacks a predictable duration or trajectory, and the end may be tomorrow, next month or even next year. As the American forecaster Ivan Tannehill wrote in 1947:

The first rainless day in a spell of fine weather contributes as much to the drought as the last day, but no one knows precisely how serious it will be until the last dry day has gone and the rains have come again.¹⁸

The term 'breaking of the drought' so often used in popular culture, such as the 1920 Australian film of that name, ¹⁹ implies that the end is abrupt and comprehensive. In reality, droughts usually end with hesitant, intermittent showers, interspersed with increasingly shorter dry spells, rather than a decisive deluge.

Even once rainfall returns to normal (which in arid and semi-arid areas may be intermittent), recovery of water supplies, plants and animals is slow, and it can take many months for pasture and crops to regrow and stock to recover. Rob Nixon, in his book *Slow Violence and the Environmentalism of the Poor*, describes 'slow violence' as situations where destruction is delayed and dispersed and where the impact is incremental and accumulative.²⁰ In semi-arid areas it may take many months of 'normal' rainfall to fill a dam or reservoir, and often vegetation is slow to revive. In June 1945, newspapers reported the end of a six-year drought, but southern

¹⁷ Australian Government Bureau of Meteorology: www.bom.gov.au/climate/glossary/drought.shtml, accessed 25 May 2018.

¹⁸ I. R. Tannehill, Drought: Its Causes and Effects (Princeton, NJ: Princeton University Press, 1947).

¹⁹ Franklyn Barrett (dir.), The Breaking of the Drought (1920).

²⁰ Rob Nixon, Slow Violence and the Environmentalism of the Poor (Cambridge, MA: Harvard University Press, 2011).

Australian farmers continued to hand-feed stock well into September as late winter and early spring remained too cold for grass to rejuvenate.²¹ Even once growth returns there may remain tangible evidence of drought in eroded landscapes, dead vegetation and weakened fleece staple on sheep that have been deprived of adequate nutrition.²²

Droughts are periods in which normal expectations are overturned. Rainfail often continues during drought, albeit at a much lower level, but it becomes erratic soaking one district, one farm, even one paddock, while leaving neighbouring land dry. Even once a drought is known to have commenced in one area, it may still be unclear if other areas will also succumb. Even now, forecasting beyond the next six or seven days lacks local precision. In the late nineteenth and early twentieth centuries, forecasting was notoriously imprecise. For the farmer, then, drought appeared to be chaotic—with rainfall eschewing any known patterns. Catherine Currie, a farmer in south-eastern Victoria, wrote during the Federation drought in 1898 that she had lost faith in her usual signals of rain: 'I do hope it will come [sic] rain this time. I saw the Black Cockatoo flying very low in the green trees. That used to be a sine [sic] of rain but all signs has [sic] failed this long time'. 23 Dust storms epitomised the chaos of drought: soil flies, sand fills the house, daylight becomes darkness, people get lost and birds roost in the afternoon. Northern Victorian sheep and wheat farmer Charles Coote describes a terrible dust storm during the Federation drought in 1902: 'Very warm wind from N culminating at 4.20 pm in terrible dust storm producing total darkness which lasted 15 min. Most remarkable and disagreeable day in my experience'. 24 The following summer he writes about burning a candle for twenty minutes from 1.30 in the afternoon during another dust storm.²⁵

2. Emotional responses to the uncertainty of drought

The particular nature of drought generated profound uncertainty, which was manifested in emotions such as disappointment, anxiety, despair, envy, shame and hope. Without a defined trajectory or distinct end, farmers were left simply watching and waiting for rain. Clouds raised expectations of rain that did not materialise, generating only disappointment. In the early months of the Federation drought in 1895, Currie wrote again and again of dashed hopes: 'cloudy and cool this morning. I did think we would have rain last night[:] the Glass fell and rose again. So tho it

²¹ Una Falkiner, Diaries, 1920–48. MLMSS 423/1-101. Mitchell Library, State Library of New South Wales.

²² Jill Ker Conway, The Road from Coorain (London: Mandarin, 1990), 10.

²³ Ann Catherine Currie, Diary, 2 April 1898. MS 10886 1873–1916. State Library of Victoria.

²⁴ Charles William Coote, *Diaries and Papers*, 1900–1955, 12 November 1902. 1964.0005. University of Melbourne Archives.

²⁵ Coote, Diaries and Papers, 14 February 1903.

is cloudy I am afraid any chance of rain is gone'. Similarly, later during the same drought, the north-eastern Victorian resident Robert Forsyth remarked: 'Once again I must record weather as fine. Alas! too fine'. ²⁷

As Currie's comments illustrate, uncertainty and confusion are a critical part of many environmental events, and research into contemporary environmental disasters has noted that uncertainty about personal safety and property damage has detrimental effects on emotional well-being.²⁸ Drought involves many layers of uncertainty: meteorological, financial, environmental and social.²⁹ This leads to a feeling of loss of control and mastery, of helplessness and a sense of futility. In addition, long-term environmental events may be characterised by obsessive and potentially disabling worry, and uncertainty about what constitutes an appropriate level of worry.³⁰

Absence of rain provoked profound anxiety as farmers feared loss of water and feed for their crops, animals and themselves. Currie wrote, again in 1895: 'still hot and dry. All very anxious as to the weather, the old old February cry for rain'.³¹ Always vocal about her emotions, Catherine explained the effect which lack of rain had:

Came a rain shower but only 3 points just stop the threshing, but they went on again till 8 o'clock. Rose [her daughter] laughed at me when I said that little rain causes a sore place at my heart but it did.³²

The Central Victorian wheat farmer Albert Field explained his fear for the future in a letter to relations in England: 'a great proportion of the colony was subject to drought. A still greater portion suffered a partial one, which was just sufficient to cause a little suffering and a great fear'. ³³ Even more eloquently, in an undated account from rural New South Wales, a member of the Rudder family recalled a period of drought, probably in the early twentieth century: 'The dreadful heat held on unaltered and night settled down black and sinister. It was as though some doom hung over us'. ³⁴

Deep anxiety and despair occasionally became debilitating. The young grazier Mordaunt Hunter, who had sheep and cattle near the Lachlan River in western New South Wales during drought in 1893, wrote: 'I wish I had never seen the Lachlan...

²⁶ Currie, Diary, 5 February 1895.

²⁷ Robert Forsyth, *Diary*, 4 November 1899. MS 8953. State Library of Victoria.

²⁸ Afifi, Felix and Afifi, 'The Impact of Uncertainty'.

²⁹ G. M. Sartore, D. Kelly, H. Stain, G. Albrecht and N. Higginbotham, 'Control, Uncertainty, and Expectations for the Future: A Qualitative Study of the Impact of Drought on a Rural Australian Community', *Rural and Remote Health* 8, no. 3 (2008): 950.

³⁰ T. J. Doherty and S. Clayton, "The Psychological Impacts of Global Climate Change", *American Psychologist* 66, no. 4 (2011): 265, doi.org/10.1037/a0023141.

³¹ Currie, Diary, 13 February 1895.

³² ibid., 18 January 1898.

³³ Albert Field, Correspondence, 1873-84, 102. MS10690. State Library of Victoria.

³⁴ Rudder family, Rudder Family Papers, 1856–1931. MLMSS 856. State Library of New South Wales.

I wish I had [a home] to go to besides this. It isn't a sweet one tonight—never will be'. 35 After six out of nine exceptionally dry years during the 1940s, the Merino breeder Otway Falkiner retreated to bed prostrate with anxiety. His wife Una wrote in her diary: 'He says he is done, can't think clearly[:] "What is the use of trying to do anything[?]" While none of the diaries and correspondence I consulted in this research hint at more tragic consequences of this despair and anxiety, memoirs occasionally describe examples of suicide directly caused by drought, such as Jill Kerr Conway's account of her father's death in the 1940s. Recent psychological and medical research shows strong empirical links between uncertainty and emotional distress, and prolonged uncertainty has been correlated with serious mental health issues such as anxiety, post-traumatic stress disorder and suicide. 38

The geographically arbitrary nature of drought as well as the cruelly erratic nature of rainfall during drought, which left one farm wet while neighbours remained dry, provoked envy on the part of farmers. Many farmers tried not to begrudge others' rain, but a sense of regret and envy pervaded their writing:

The rain does not come. 15 points yesterday. Am thankful for that but I can't help feeling envious when we read of the places getting inches—perhaps they were more in need of it than we are.³⁹

Field lamented: 'I believe there has been plenty of rain in most parts of the colony, a very few miles from here even, but we [are] amongst the unfortunates [sic] ones this time in weather account', 40 and in a later letter: 'In some districts of the colony they have enjoyed a very fair season, but in this part it has been a strange winter. The rainfall has been very limited'. 41 During 1944, in one of the worst droughts that the New South Wales Riverina had experienced, Una Falkiner travelled to Sydney, where she noted crossly: 'it was raining as usual in Sydney when I arrived'. 42

It is the nature of pastoralism and agriculture, which are adapted to particular ecological conditions, that most farmers and graziers in a given geographic area undertake the same or similar activities. Therefore, drought is an experience shared. While it could be a source of comfort for farmers to know they were not alone

³⁵ For example, Arthur Mordaunt Hunter, *Diaries and Papers*, MS 000887.001-009. Royal Historical Society of Victoria, 30 June and 1 October 1892. Underlining in original text.

³⁶ Falkiner, Diaries, 7 April 1945.

³⁷ Conway, The Road from Coorain, 85-6.

³⁸ Y. Bar-Anan, T. D. Wilson and D. T. Gilbert, 'The Feeling of Uncertainty Intensifies Affective Reactions', Emotion, 9, no. 1 (2009): 123–7, doi.org/10.1037/a0014607; I. Hanigan, D. Colin, D. Butler, P. Kokic and M. Hutchinson, 'Suicide and Drought in New South Wales, Australia, 1970–2007', Proceedings of the National Academy of Sciences of the United States of America 109, no. 35 (2012): 13950–5, doi.org/10.1073/pnas.1112965109; S. J. Santacroce and Y. L. Lee, 'Uncertainty, Posttraumatic Stress, and Health Behavior in Young Adult Childhood Cancer Survivors', Nursing Research 55, no. 4 (2006): 259–66, doi.org/10.1097/00006199-200607000-00006.

³⁹ Currie, Diary, 14 February 1898.

⁴⁰ Field, Correspondence, 83.

⁴¹ ibid., 86.

⁴² Falkiner, Diaries, 6 July 1944.

(see Section 3 below), it also led to close comparisons between farmers who rated their own and each other's productivity, efficiency and success against their peers. Farming is a very public activity, in the open and on a large scale, and any problems could not be easily hidden: weeds, failing crops, starving sheep and eroding paddocks were public evidence of hardship, or what might be perceived as mismanagement. During the dry 1920s, Charles Coote remarked ruefully: '[Neighbours] again good for the year. My crop apparently the worst in the district ... fallow hardly up to the average'.⁴³ The sheep and dairy farmer Margaret McCann wrote in her diary at the height of the Federation drought:

We are poor manager's [sic] but what is the use of grumbling[?] We should have had wethers on instead of ewes and lambs, our 450 ewes were too poor for a time to get in lamb, and now they are too late. We ought to have 2000 sheep instead of only 1000 all told, and [our neighbours are] making more cream and butter.⁴⁴

Despite the disappointment, fear, despair and shame associated with exceptionally dry weather, droughts also brought moments of elation and euphoria. The Rudder Family Papers recalled the first falls of rain during drought:

It must have been midnight when a faint sound roused me—a tiny sound—like falling raindrops on the roof. I sat up. I listened, yes, there it was again and more of it—did my ears deceive me? ... Yes—it was the rain. The sweet, cool, cleansing rains. I climbed out of bed and encountered my father lamp in hand. 'Boys, girls'—he called in a voice that almost crackled with emotion 'it[']s rain—the drought has broken—come to your mother[']s room.['] We all went and there he fell to his knees with us all round him and gave thanks to God.⁴⁵

Similarly, Una Falkiner recounted a conversation she had with her husband, Otway, during drought in the 1940s:

Come and listen, look can you hear it?—3.30 am! Lovely steady rain! That all soaked in. Otway was purring and was so delighted that he went off in his car in the dark to see how the sheep were eating their chaff and oats.⁴⁶

3. Some efforts to ameliorate uncertainty

People's response to profound uncertainty was to counteract the seeming chaos by creating a sense of order and control. Meteorological records offered some hope of creating meaning from the unpredictability of drought. Systematic and disciplined recording of weather had been undertaken in Britain since the eighteenth century.

⁴³ Coote, Diaries and Papers, 27 October 1927.

⁴⁴ Margaret McCann, Diary, 1893–1910, 6 September 1902. MS 9632. State Library of Victoria.

⁴⁵ Rudder family, Rudder Family Papers.

⁴⁶ Falkiner, Diaries, 12 December 1944.

These records were one of the tools of science that, it was believed, would enable people to accumulate knowledge and rationalise and organise nature. The practice was brought to Australia with early British settlers and, by the 1880s, a huge network of paid amateurs gathered information such as rainfall, temperature and barometric pressure for colonial meteorological offices. The Currie family were part of this network and, during inclement weather, Catherine regularly consulted barometric pressure (on her verandah) and recorded her readings for the colonial meteorological office. The historian Chris O'Brien observed that weather records enabled European settlers to create order from the seemingly incomprehensible climate they were experiencing.⁴⁷

The writing of a diary and the inclusion of rainfall records were ways for individuals as well as government to create order out of chaotic weather such as drought. Farmers diligently recorded weather in their diaries. Following the failure of the autumn rains in 1927, the South Australian sheep and wheat farmer Lindsay Bettison was careful to note cloud formations such as 'fleecy', 'streaky' or 'thin', and wrote hopefully: 'Some thin clouds showing look more like rain clouds than any for some time'. ⁴⁸ Coote created meticulous gridded rainfall charts in his diary that enabled comparisons across years. Inserting rainfall in a grid mediated droughts' unfathomability. These farmers did not have delusions of controlling the weather, but charts, grids, the orderly arrangement of rainfall records and the search for patterns made the weather more comprehensible, less arbitrary. They suggested the possibility of regulating and tidying the messiness of the weather and wrestling some understanding from the conditions around them.

The search for blame was another way in which individuals coped with the emotions evoked by drought. As Nixon observes, the seeming arbitrariness of slow environmental events that pose no immediate threat to life and property, and that have no obvious cause, hinder efforts to mobilise and act decisively on the part of both individuals and authorities.⁴⁹ Prior to the Enlightenment, extreme weather events were understood to be visitations of divine wrath for sinfulness, slothfulness and contempt for God. This was still evident among some clergy in the mid-nineteenth century.⁵⁰ However, by the late nineteenth century, meteorologists and the media, even most members of the clergy, condemned the connection between sin and

⁴⁷ Chris O'Brien, 'Imported Understandings: Calendars, Weather and Climate in Tropical Australia 1870s–1940s', in *Climate, Science, and Colonisation: Histories from Australia and New Zealand*, ed. James Beattie, Emily O'Gorman and Matthew Henry (New York: Palgrave Macmillan, 2014), 195–211, doi.org/10.1057/9781137333933_11.

⁴⁸ Thomas Lindsay Percival Bettison, *Diaries and Papers*, 1927–62, 21 April 1927. PRG 1484. State Library of South Australia.

⁴⁹ Nixon, Slow Violence and the Environmentalism of the Poor, 2.

⁵⁰ For example, Rev. George Stonehouse, *The Drought and Its Lessons: A Discourse Delivered in Lefevre Terrace Chapel, North Adelaide, on Sunday Morning, November 12, 1865*, theological ed. (Adelaide: Gall, Printer, 1865).

drought.⁵¹ Days of prayer for rain continued to be held; however, the emphasis moved towards requests for God's intercession in misery, and none of the writers I consulted, even the most religious such as the Presbyterian Currie or the Methodist McCann, associated drought and sinfulness. Removal of sin as a cause for drought absolved people of a sense of misdemeanour, but its demise left a void of blame. Having something or someone to blame countered uncertainty, but without human cause how could drought be explained?

In the absence of a tangible cause, people created an entity to blame, and late nineteenth- and early twentieth-century farmers directed their emotions at the apparent source of the weather—the sky itself. The sky, and in particular rainless clouds, played the role of an amorphous capricious entity to rail against. 'Tried hard to rain but didn't succeed' and similar laments were regularly written in diaries, as if the sky had the power of choice to give or withhold. The Tasmanian farmer Rowland Skemp noted farmers' inclination to anthropomorphise weather:

All farmers are 'weather minded'. Their livelihood is so dependent on its vagaries that the weather becomes not merely a topic of casual conversation, but a real power for good or evil; not quite a god to be placated, but rather a capricious and somewhat malicious spirit that may be cursed or blessed according to what goods it delivers. ⁵²

Drought is a cultural symbol of external threat.⁵³ Sharing the experience and acknowledging that all were struggling contributed to farmers feeling both less vulnerable and less at fault. Field wrote of drought in the 1870s: 'we have got thrashed and so [have] all the farmers around here. Everybody concerned is disappointed with the yield ... Of course we are in the same position as other people'.⁵⁴

Currie's writings are punctuated by many statements of collective troubles experienced by her community of Lardner in West Gippsland: 'all wishing for rain' and 'Been a lot of rain all night will do such a lot of good—we are all very thankful for it coming in time for us'. 55 Studies of recent droughts of the 1990s and 2000s suggest that social networks, communities and social capital are significant factors that assist people to cope with the emotional impacts of drought. Immediate family has been found to be particularly important in providing solidarity. Social groups, clubs, community events and institutions also provide emotional support,

⁵¹ Jan Golinski, 'The Weather in Eighteenth-Century Britain', in *Weather, Climate, Culture*, ed. Sarah Strauss and Ben Orlove (Oxford and New York: Berg, 2003).

⁵² John Rowland Skemp, Memories of Myrtle Bank (Carlton, Vic.: Melbourne University Press, 1952), 231.

⁵³ B. West and P. Smith, 'Drought, Discourse and Durkheim: A Research Note', Australian and New Zealand Journal of Sociology 32, no. 1 (1996): 93–102, doi.org/10.1177/144078339603200109.

⁵⁴ Field, Correspondence, 78.

⁵⁵ Currie, Diary, 18 December 1897 and 29 October 1898.

recreation, escape and solidarity.⁵⁶ The communal experience of drought in a local area created a sense of an external foe to be resisted and against which communities united, and there is a preponderance of local and community histories that eulogise the hardships of drought. One very tangible example of united community action against drought is the building of barrages across the Murray River during the 1914–15 drought. When the river dried to a meagre trickle, communities such as Waikerie, Renmark, Wentworth and Nyah in South Australia, New South Wales and Victoria built sandbag barriers to conserve their remaining water (at the expense of those further downstream).⁵⁷ This shared endeavour not only preserved their meagre water supply but also gave residents a sense of solidarity.

4. Accepting uncertainty

Settlers in late nineteenth- and early twentieth-century Australia tried to find ways to ameliorate the uncertainty of drought, and to impose order, manageability and control where there appeared to be only disorder and chaos. While these strategies were helpful, a particularly valuable factor that assisted people at the time to adapt to drought was a wider culture of enduring uncertainty reinforced by both environmental as well as social conditions and cultural norms. Uncertainty and lack of control were an inherent reality for most ordinary people of the late nineteenth and early twentieth centuries: irregular income and intermittent employment were the norm rather than the exception for both rural and urban dwellers, unexplained infectious diseases were rife, rates of accidental death were high, social safety nets were almost non-existent and those with little money had few choices in life. Negotiating scarcity and hardship was part of everyday life. The normality of uncertainty in everyday life itself assisted people to accept the uncertainty of drought.⁵⁸

Lack of control was particularly apparent in peoples' relationships with the environment. European settlers were part of an aggressively confident empire that transformed the vegetation, animals, soil, water and even topography of their adopted land. Despite this, ordinary people were forced to continually acknowledge that control of the physical environment was an illusion: daily life for most people was entwined with the discomforts of heat, cold, wind, sun, dust and mud. People in general and farmers in particular were wholly dependent on resources beyond human control such as rivers for water and transport, pasture for moving

⁵⁶ D. J. Maybery, R. Pope, G. Hodgins, Y. Hitchenor and A. Shepherd, 'Resilience and Wellbeing of Small Inland Communities: Community Assets as Key Determinants', *Rural Mental Health* 19, no. 4 (2009): 326–39; Sartore et al., 'Control, Uncertainty, and Expectations for the Future', 950; J. Greenhill et al., 'Understanding Resilience in South Australian Farm Families', *Rural Society* 19, no. 4 (2009): 318–25, doi.org/10.5172/rsj.351.19.4.318.

⁵⁷ Photographs in the State Libraries of Victoria and South Australia provide evidence of this.

⁵⁸ Stuart Macintyre, *The Oxford History of Australia: The Succeeding Age 1901–1942* (Melbourne: Oxford University Press, 1993), 4, 46; Jenny Lee and Charles Fahey, 'A Boom for Whom? Some Developments in the Australian Labour Market, 1870–1891', *Labour History* 50 (1986): 1–27, doi.org/10.2307/27508779.

stock long distances, forests for timber and the non-human world of reproduction, decay, pollination, photosynthesis and respiration that occurred uncontrolled by humans. This inherent uncertainty in society made the unpredictability of drought a little more acceptable, as farmers admitted, through their relationship with the weather, that their mastery of the world was fragile; that the autonomous human was an illusion and that humans did not control the non-human world but were as controlled by it as it was by them. This humility helped them to accept inherent uncertainty in the climate.

More emphasis was placed on enduring than on certainty. While, as Anderson notes, stoicism is an important aspect of cultural narratives of drought amongst many farmers in semi-arid areas today, in the late nineteenth and early twentieth centuries, forbearance in hardship was elevated to a virtue and accepted as an unquestioned philosophy or faith. Religious belief played an important role in people accepting misfortune and suffering. Indeed, the Presbyterian Currie's regular laments about desiccating crops and the absence of rain were almost always punctuated by statements of acceptance and religious faith such as: 'Oh how I wish we had some rain but it must be God's Will. Lord increase my faith'.⁵⁹ While there were many religions present in Australia at the time, the dominant religious and cultural influences were Catholicism and Protestantism, and non-conformist Methodists and Presbyterians were particularly well represented among settlers in south-eastern Australia. Catholics and Protestants created meaning by assigning redemptive power to suffering, as Joanna Bourke discusses in *The Story of Pain*. Hardship was believed to nudge the sufferer towards virtue, stimulating personal development and ensuring salvation, as well as being punishment for sin, as discussed above. 60 However, as Bourke notes, often the exact meaning of suffering was obscure, as Currie lamented during the Federation drought in 1896: 'windy very drying, when we want rain most, must be for the best, some way if we only knew'.61

Conclusion

The aleatory nature of uncertainty during drought in which the nature of the drought itself was innately uncertain—the beginning and end ill-defined, the duration long and slow, and the pattern of scarce rainfall erratic—meant that uncertainty was one of the most profound emotional experiences of drought as recorded by Australian farmers in their personal papers during the late nineteenth and early twentieth centuries. This uncertainty in turn generated a range of emotions such as anxiety, despair, envy, shame, fear and elation, to name but a few. Although these emotional

⁵⁹ Currie, Diary, 1 February 1898.

⁶⁰ Joanna Bourke, The Story of Pain (Oxford: Oxford University Press, 2014), 91–112.

⁶¹ Currie, Diary, 23 November 1896.

experiences were profound, people *did* find ways to ameliorate their impact though community solidarity and creating a sense—at times an illusion—of control in which their diaries and personal papers played an important role in helping them to gain an understanding of the drought experience. But it was the social acceptance of uncertainty in many facets of Australian society at the time that contributed most to buffering the emotional experience of drought. Today, we are less accepting of uncertainty than people were 100 years ago. Unknowability, intangibility and the absence of blame are distasteful to today's sense of manageability and mastery, and industrial agricultural systems require predictability, order and someone to be accountable. And yet we live in a world of ever-increasing climatic uncertainty, and perhaps can we learn a little from early settlers' humility in the face of uncertainty.

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