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Building cultural capital in drought adaptation: lessons from discourse analysis

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Abstract. As governments and primary industries work to build the climate resilience of Australian agriculture, individual producers are often called upon to implement strategies to become more adaptive in the face of drought. These strategies include infrastructural changes to agricultural businesses, changes to practices, and the adoption of new skills and knowledge. The transition towards greater drought adaptiveness will also demand broader cultural shifts in the way that drought is defined and approached as an issue facing primary producers. This paper presents the results of a discourse analysis conducted as part of social research exploring the cultural barriers to drought preparedness within the Queensland Government's Drought and Climate Adaptation Program (DCAP). Focusing on media and government accounts, the analysis found two different ways of framing drought and its management in Queensland agriculture. The first, which is dominant in media accounts, emphasises the disruptive power of drought, presenting it as a profound difficulty for producers that is managed using endurance, hope and ingenuity. This frame adopts highly evocative discursive strategies oriented towards mobilising community sentiment and support for producers. The second, which is less prominent overall, downplays drought's disruptive power and counters the emotionality of the adversity discourse by presenting drought as a neutral business risk that can be managed using rational planning skills and scientific knowledge. In discussing these two frames, this paper suggests strategies whereby drought adaptation frames might be made more powerful using more meaningful and emotive narratives that showcase it as a vital practice for ensuring agricultural livelihoods and rural futures in a changing climate.

Keywords: agriculture, Queensland, drought, climate adaptation, culture, cultural capital, framing, communication, discourse, primary producers.

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Introduction

At a time when human society is facing disruptions of profound complexity, the concept of 'resilience' has emerged as a standard aspirational goal for both government and non-government organisations (Adger et al. 2011; Reid and Botterill 2013; Schipper and Langston 2015). The word derives from the biological sciences, where it refers to the capacity of an ecological community or ecosystem to reorganise itself and absorb disturbance, so it retains its functional and structural integrity even during times of change (Adger et al. 2011). In relation to environmental and social policy, however, its use has been expanded to refer not only to natural and environmental systems but also to human systems, including social systems, communities, industry sectors and more. Put simply, resilience is the way people, groups, institutions and environments adapt to and respond to change together that better manages its impacts (Jones 2017, p. xxii).

In the face of the increased risks presented to the agricultural sector by drought and climate change, significant efforts have

been made by producers, governments and industry groups to build the resilience and adaptation of Australian agricultural production systems. Programs such as Queensland's Drought and Climate Adaptation Program have sought to support and encourage greater drought preparedness and the long-term viability of agricultural enterprises in the face of a variable climate. These programs have focussed on building capacity for preparing for and managing drought at the farm level, targeting improved production infrastructure, improvements to climate and seasonal forecasting, and the facilitation of agricultural extension networks to share technical knowledge and encourage business practices considered an important part of greater drought preparedness (Howden *et al.* 2014).

However, the transition towards more adaptive and proactive agricultural approaches to drought and climate will involve shifts in ways of thinking that extend far beyond the farm gate. The community and social networks in which agricultural systems and livelihoods are embedded will also play a role in the shift towards greater drought preparedness and

adaptation. As several studies have already found, as well as being a climatic phenomenon, drought is also a socially and politically mediated concept with cultural significance in Australia at a personal, community and national level (see, for example, Cockfield 2013; Anderson 2014; Jones 2017; Rickards et al. 2017). Other studies have demonstrated that greater climate adaptation will require changes to the knowledge and beliefs that individuals, groups and social systems draw upon to understand, respond and adapt to environmental change and their associated socioeconomic risks (Adger et al. 2011, 2013; Marshall and Stokes 2014). This paper presents the findings of social research conducted under the Queensland Drought and Climate Adaptation Program, which has explored some of the broader cultural factors at play in beef and sheep producers' approaches to drought preparation and adaptation in Queensland, and ways that some of the these factors might impede or hinder adaptive approaches to drought. Of particular focus here is a discourse analysis that compares the ways that drought and its impact on agricultural livelihoods are framed and constructed in rural media stories and government accounts promoting the value of drought and climate adaptation practices. In doing so, this paper illustrates two different ways of framing drought and its management in Queensland agriculture: one uses evocative narratives to emphasise the disruptive power of drought and highlight the role of collective support for producers, while the other counters this emotionality by presenting drought as a more neutral business risk that can be rationally managed by graziers (pastoralists) through planning and scientific knowledge. The implications of these two framings for building cultural capital in drought preparation are discussed.

The cultural framing of drought management

In the social sciences, culture encompasses the shared knowledge, practices and material items of social groups that enable them to form and interact together. It can manifest at global scales (such as ubiquitous forms of popular culture), but also at more specific or local scales (such as in place-based communities, professions or organisations or industries). Cultural knowledge includes shared, often place-based identities, shared beliefs, values and norms. Cultural practices include shared rituals, taken-for-granted habits and protocols, and tacitly prescribed processes for getting things done. Cultural items include the things, tools and technologies that we design and use as part of practicing culture (Adger et al. 2013; Highmore 2016). Given this breadth, culture is an important consideration for implementing any sort of social program or trying to influence social change because, put simply, it mediates how a group already thinks and acts, how they will perceive and define the problems facing them, and the solutions they imagine to be possible and acceptable.

A community or group's existing identity, value and belief system, reward practices and accepted 'commonsense' ways of doing things has been referred by philosophers and social scientists as its existing *cultural capital* (Bourdieu 1986; Flora *et al.* 2016), and this is a useful concept for thinking about the challenges that might be encountered by programs such as the Drought and Climate Adaptation Program. Strongly held cultural capital has cohesive effects – creating a shared sense of

purpose in a community, pride and a sense of belonging – but it can also have exclusionary effects. New ideas, technologies and practices must compete with more entrenched practices, identities and beliefs. They can be met with resistance, discomfort and distrust even when there might be very sound reasons for a community to adopt or embrace change. Conversely, government and community programs that seek to implement changes without consideration of or sensitivity to existing cultural capital can inadvertently marginalise and alienate the very communities whose participation they are seeking to engage and whose social licence they require.

One of the ways that cultural knowledge is constructed, maintained and transmitted in social interaction is through forms of communication, including text, speech, signs and symbols. A key term in the social sciences – 'discourse' – refers to way the social and cultural power works through the process and patterns of communication. Put simply, through the notion of discourse, words and symbols can be seen not only as a reflection of culture but as an active part of its production (Hajer and Versteeg 2005; Fleming *et al.* 2018). Examining the ways that discourse works can shed light on how cultural ideas and ways of seeing the world and imagining the future are created, transmitted and maintained, and discourse analysis is an established research method whereby forms of communication are closely examined to understand how they reflect and construct social life, giving meaning to the various people and things in it.

Discourse analysis has been shown to have important applications for exploring the social factors at play in complex and controversial socio-environmental issues. Some authors have shown how discourse constructs and politicises our ideas of nature and environmental governance (e.g. Hajer and Versteeg 2005), whereas others have looked at the different discourses at play in debates about how best to respond to natural events and disasters (Anderson 2014; Aldunce et al. 2015). Discourse analysis and attention to the way that language is used around issues such as climate change have been shown to shed useful light on how these issues become polarised, contentious and altered through different discourses (e.g. Oppermann 2011). Nisbet (2009) for example, explores how the media 'frames' the issue of climate change and how these dominant 'interpretive storylines' (p. 15) influence how climate change is problematised and what the potential solutions might be imagined to be. Others explore discursive framing in other contexts: Christoff (2013) and Fleming et al. (2014) discuss how dominant discursive fields and frames shape and constrain policy responses and meaningful action on climate change, while Taylor et al. (2014), Foss (2018) and Schlosberg et al. (2017) explore how competing frames can create conflict over approaches to climate adaptation, planning and disaster management.

Research approach

To build on this work and explore how drought and its relationship to Queensland graziers was being presented and discussed, a comparative analysis of discourses relating to drought, grazing and drought preparation was conducted. Of particular interest was how drought was being framed in rural newspapers, which play a key role in communication networks in rural Australia and in the fostering of local identities and social capital

Dominant definitions of drought	A negative and profoundly difficult natural event caused by a lack of rain
How drought is experienced	In the here and now, as a major threat to grazing families and rural communities more broadly
Knowledge drawn on to deal with drought	Vernacular or 'traditional' forms of knowledge: direct experience, lessons from previous droughts, on ground know-how and rules of thumb, short-term weather forecasts
Skills required to manage drought	Adversarial (battling) skills: Psychological fortitude to fight or to 'ride the drought out', luck and good fortune, the ability to gamble against drought
Support for drought	Rallying community support (local and more broadly) and a sympathetic government, e.g. feel-good stories about helping
Solutions to drought	Rain, which is a relief when it comes and a cause for celebration

Table 1. Summary of the 'Battling adversity' frame

(Bowd 2012). Three news sources considered to be of particular relevance to Queensland graziers were collected: the Queensland Country Life and The Courier Mail newspapers; and ABC (Australia's national broadcaster) Rural Online. Articles dated between June 2016 and December 2018 which contained the word 'drought' were collected. For the Queensland Country Life and the Courier Mail, articles were searched and sourced via news and media databases Thompson Reuters Westlaw and Factiva. Initial searches yielded over 1000 Queensland Country Life articles relating to drought were searched for and accessed directly from the ABC News website using the website's search function. The results of this search were refined to include rural and agriculturally focussed articles and yielded 65 articles.

A broad approach to choosing which articles to include in this research was taken to ensure that all types of discourse, narratives or 'stories' being told about drought were included. For this reason, the analysis included news reports, personal interest stories, and opinion-pieces. This meant that several different ways of framing drought – as a rural issue, as a climate issue, as an agricultural issue and as a personal and family issue were captured. Home gardening articles, sports reports (which frequently use the word 'drought' to describe a losing streak) and real estate articles were excluded.

Data were analysed using the qualitative software package NVivo. During analysis particular attention was paid to the discursive 'frames' (Nisbet 2009) used i.e. how drought and drought management is being defined and described, as well as the discursive 'strategies' (Taylor *et al.* 2014) i.e. the narrative and rhetorical tactics that are adopted to give these definitions structure and power. Initial open coding was conducted first, followed by a more hierarchical, comparative analytical process to create a typology of the different ways that the relationship between graziers and drought was framed. Through this analysis it was possible to classify the discursive material into six key categories. These categories were:

- how drought is being defined;
- how drought is being experienced;
- the knowledge drawn on to deal with drought;
- the skills graziers need to deal with drought;
- what 'support' for graziers regarding drought might look like; and
- what the ultimate solution to drought might be.

With these categories, it was possible to identify some of the ways in which the material qualitatively differed, allowing the researcher to distil a great deal of qualitatively complex data into a simplified comparative typology, containing two broad discursive framings of drought and drought management. These are referred to as the 'Battling adversity' frame and the 'Managing business risk' frame.

The 'Battling adversity' frame

In the 'Battling adversity' frame (Table 1), drought is a weather event that is bestowed with considerable power as a key agent in the hardships, disadvantages and adversity experienced by Oueensland primary producers and rural communities. Many of the narratives within this frame present dryness and drought as a profoundly difficult event in rural lives, with overwhelmingly negative effects on the financial and psychological wellbeing of graziers, other primary producers, and rural communities. That these narratives exist is not surprising given the very real and difficult effects of drought on landscapes, livestock and economic stability. However, the emphasis on drought's destructive power works alongside another narrative which presents drought-affected rural producers as 'battlers' in an adversarial, competitive relationship with drought and the weather. Here, graziers and other primary producers are typically depicted either in situations of endurance or survival, drawing on knowledge and skills that enable them to play a game, gamble or fight against the negative influence of drought. In these narratives, drought and graziers are pitted against each other: there are winners and losers. When drought wins, graziers are 'forced' to react and take measures (such as late destocking), to survive. When graziers win, they are depicted as having been strong and stoic, lucky, or as having 'outsmarted' and fortified themselves against drought. Within this broader discursive frame, support is depicted as coming from both local and broader communities, and associated organisations and charities, that rally around battling graziers to help them deal with the difficulties posed by drought. The need for sympathy and support from governments and politicians during drought is another discursive theme, with a key narrative that presents struggling producers as being either forgotten or ignored by elite urban groups and people in positions of power. In the 'Battling adversity' frame the ultimate solution to drought is enough rain, which signals the end of the drought event, and an upturn in graziers' fortunes. Rain events are often presented as a source of intense relief for graziers and a cause for celebration.

Oppressive drought

Various discursive strategies are used to great effect within this framing, to construct drought as a profound and powerful agent creating hardships for graziers and rural communities. One of

the most common observed in the media articles was the repetitive use of highly evocative verbs and adjectives to describe the drought experience. Adjectives such as 'severe', 'extreme' and 'tough', emphasise the raw power of drought, whereas others, such as 'crippling', 'devastating', 'heartbreaking', 'crushing', 'traumatic' and 'soul destroying', emphasise its dire emotional impact. References to drought's broader effects such as 'drought-stricken', 'drought-ravaged', 'desolate' landscapes, 'blistering' heat, 'dying' animals, 'baked' and 'wilted' crops – were also commonly used to paint a vivid picture of drought as an acute and difficult event. Alongside these terms and phrases, media stories often used evocative narratives to emphasise drought and dryness as a powerful cause of emotional difficulty for graziers and other primary producers. The excerpt below is one of many examples of these types of narratives, and describes the suffering experienced with prolonged dryness.

'NO RAIN, MORE HEARTBREAK. [Property owner's name] switched off the portable television set, disheartened by the forecast of continuing fine weather over southeast Queensland. It was soul-destroying, he said, to see the weather chart come up dry and without even a hint of the rain that rural producers needed desperately. His property is so dry that for three weeks now he has been on the road with 150 cows and calves he is trying to keep alive until the drought breaks' (Courier Mail, 3 January 2018).

As well as emphasising the difficulties of drought, drought is also often depicted as being exceptional in its severity, with statistics used to emphasise the extent of drought and comparisons made with other historically significant dry periods. Media articles describe drought as dominating and degrading producers: a punishment, a menace, a disease, and a tyrant responsible for untold suffering for regional towns, graziers and rural communities.

'The drought she calls 'the disease' is sticking around longer than anyone had hoped. And the winter months are usually the driest, so there's no reprieve in sight...The relentless weather has held her family to ransom since the new millennium' (ABC Rural, 31 July 2018).

Battling graziers

Associated with depictions of drought as a powerfully negative event in the 'Battling adversity' frame were depictions of graziers and other producers engaged in an adversarial relationship with it: fighting, enduring, or playing some sort of game with drought. Militaristic metaphors portray agricultural producers as defending their livelihoods against a relentless, invasive drought.

'Graziers in Queensland, New South Wales go into 'survival mode' as the drought marches towards the coast' (ABC Rural, 26 June 2018).

The reserves or skills that producers in these depictions drew on were not the ability to plan or prepare for a future drought, but the ability to fortify oneself against, and to bear, the emotional difficulties of drought as it is experienced in the here and now. Any actions taken to manage and deal with drought were also often likened to gambling or playing a game, with success often attributed to graziers' luck and good fortune. Hope and optimism were also valuable tools for surviving and enduring drought.

Consistent with adversarial narratives and associated representations of graziers as 'battling', 'gambling against', and 'enduring' drought, were narratives of graziers 'winning' or 'losing' against drought. A subtle form of a losing narrative can be found in frequent descriptions of graziers being 'forced' to take particular actions during drought, even when these actions such as seeking alternative income streams and making the decision to de-stock properties - are often part of strategies that pro-active grazing businesses use to adapt during times of drought. Such actions and the decisions to take them were not presented as evidence of nimble decision-making but of drought's oppressive power. Decisions to de-stock, for example, were often presented in the media as last-ditch efforts in the battle against drought, and destocked landscapes as emblematic of defeat. In the quote below highly emotive terms (e.g. 'exodus' 'stricken' 'give up' 'total' 'zero' and 'worst') are used to emphasise the power of drought to reduce a productive landscape to nothing.

'There is an exodus of cattle leaving drought-stricken parts of western Queensland as graziers give up on seeing a wet season, two months before the rains are usually due to finish. [Stock agent] describes his client base as mature — with one grazier aged in his mid-80s. [Stock agent] said neither of them had seen the region facing a total destocking of sheep and cattle as it was now. 'This region will be destocked. I reckon you can put a zero on it – probably the worst you want to see' [Stock agent] said (ABC Rural, 18 February 2018).

Rallying communities

"Battling adversity' frames that depict drought as an antagonistic invader and producers as stoic defenders were often also accompanied by stories in which rural and broader communities mobilise to support graziers in their battle against drought. Rural communities were often described as rallying to help disadvantaged graziers, and provide them with crucial material, social and emotional support during the battle against drought. Drought charities and community organisations feature heavily in these narratives and are depicted in a highly positive light – as providing a welcomed lifeline to graziers in drought-affected regions.

'Drought-stricken graziers in Queensland's central and north west have turned away from fizzled-out hopes of deliverance offered by Cyclone Alfred in the Gulf of Carpentaria this week, and are looking instead to the material and psychological lift promised by the Burrumbuttock Hay Runners. The grassroots movement to deliver hay and hope to primary producers on hard times has been cranking through the gears over the last few months to organise what will be the third enormous delivery of hay to a widespread region that's had minimal rain relief, and is about to hit top gear' (Queensland Country Life, 21 February 2017).

Among these descriptions of the community support, disdainful descriptions of indifferent politicians and privileged

Dominant definitions of drought	Future-focussed: one of many factors that individual grazing businesses must 'work with' to remain profitable
How drought is experienced	As a future risk that must be known beforehand and prepared for
Knowledge drawn on to deal with drought	Scientific knowledge: climatic patterns and broader trends, grazing decision-support knowledge. Knowledge that allows graziers to create future scenarios around drought and work towards them
Skills required to manage drought	Strategic skills: the ability to make careful decisions, to trust and draw on scientific information, and to plan strategically
Support for drought	Scientific expertise and lots of informationbut ultimately drought is an individual business responsibility, with limited role for government
Solutions to drought	No 'solution' – it is an ongoing business issue

Table 2. Summary of the 'Managing business risk' frame

city-dwellers failing rural communities rhetorically emphasised the moral and economic imperative to show solidarity with producers during times of drought.

'[Senior Queensland politician], sitting in her little inner-city electorate populated by greenies, can afford to smile and be content. She doesn't have to worry about her job. She doesn't have to worry about small Queensland country towns slowly dying due to the drought and lack of jobs' (Courier Mail, 25 May 2017).

The relief of rain

In the 'Battling adversity' frame, rain is often depicted as a delightful counterpoint to the destructive cruelty of drought, and a signal for producers of a change for the better. Stories following significant rain events are often accompanied by photos of pouring rain, drenched landscapes, and joyous adults and children revelling in the downpour, and contain quotes such as in the following example.

'Mother Nature has finally relented and delivered some much needed rain in some parts of Queensland leaving many producers smiling' (Queensland Country Life, 3 October 2017).

However, despite being a much-needed circuit-breaker to the tensions associated with drought, the language around rainfall events depicted rainfall and weather as outside the control of humans and intrinsically unknowable. Reports were sometimes ambivalent about whether rainfall was significant enough to bring about an end to drought, or emphasised the geographical disparities in rainfall, contrasting the good fortunes of those in areas that received rainfall with those who did not. By doing so, these stories inadvertently emphasise the drought as hardship narrative, with graziers again depicted at the mercy of fickle weather. Similarly, media stories about rainfall often contained cautionary tales about the dangers of assuming that rain events signal the end of drought. For example:

'No pot of rain gold: It was the end of January 2015 and graziers in the [details removed] region were cautiously welcoming their first big summer fall of rain in years. [Grazier's name] was caretaking the next door neighbour's property [details removed] when between 50 mm and 100 mm fell, and tiny green shoots were poking up amongst the black stalks in the paddocks. He was cautious about what the rain would do, saying 'we're definitely going to need

another four inch hit to do any good', and he was wise to be that way. The follow-up didn't eventuate and two years later, he and his parents, [names] were still battling a drought that was in its fifth year' (Queensland Country Life, 28 December 2017).

The 'Managing business risk' frame

In the 'Managing Business Risk' frame (Table 2), the power of drought as an agent in the hardships, disadvantages and adversity experienced by Queensland primary producers and rural communities is minimised, and drought is presented as one of many business risks facing graziers, which they must find ways to 'work with' in order to remain viable. Here the frame of drought is future focussed – rather than presenting drought as something that 'is' happening, this frame presents it as something that 'will' happen. Rather than presenting an adversarial relationship between graziers and drought, the relationship between graziers and drought depicted by this framing can be described as somewhat administrative. Drought is an ongoing risk to be managed and controlled, and the skills that are required to do this involve the ability to be strategic and unemotional, to look forward in time, and to prepare and plan. Within this broader discursive frame, support for drought management is depicted not as deriving from communities, charities, and sympathetic politicians, but from networks of knowledge, expertise and information, that enable graziers to look forward in time, make decisions and plan. Grazing experts, scientists and the government are presented as potential facilitators of drought preparation information. In this frame, drought is not depicted as a discrete weather event, with an end brought about by enough rain. Instead, it is part of a broader climatic trend and there is no ultimate solution (or resolution) to it: it is an ongoing risk that requires continuous preparation, planning and management (Table 2).

Drought as a factor of business

Rather than presenting an evocative depiction of an adversarial relationship between graziers and drought, the relationship between graziers and drought in this frame can be described as more clinical and administrative. Rather than painting an emotionally affective picture of drought as a profound hardship, these strategies pare this aspect of drought back to present it as an ongoing business risk to be managed and controlled.

Rather than presenting drought as a hardship or difficulty, this frame presents drought as an unremarkable part of grazing life and agricultural production. Here, the language contrasts starkly with the negative language which paints a picture of drought as a profoundly and uniquely difficult event. There are few visceral adjectives and little emotion depicted in these accounts of drought. Implicit in descriptions of drought as a risk, is a normative definition of drought that is future-oriented. It is something that will happen and should be continuously prepared for, rather than a current hardship that needs to be endured or resisted.

'Droughts are part of life for rural Australians; they can occur anywhere at any time. Primary producers should know how to prepare and cope with drought' (Queensland Government website).

In addition to this, drought is not treated as a discrete, anomalous and unpredictable weather event, but is somewhat normalised as an inevitable part of broader and permanent climatic changes and trends that the agricultural sector must respond to.

'Climate change poses challenges for all sectors of the Australian economy but particularly for those sectors dependent on natural resources, like agriculture, forestry and fisheries. Australia's climate is changing and the impacts of climate change can be seen in the differences we are experiencing in rainfall, temperature and extreme weather events. Climate change will influence our actions, choices and decisions' (Australian Government website).

Professional producers

Instead of presenting graziers in an adversarial relationship with drought, the 'Managing business risk' frame tends to emphasise the potential for graziers to pre-empt, manage and control drought strategically like they would factors relating to their business. This professionalism was often offered as a counternarrative to the more dominant disempowered narratives described above: presenting graziers in a position of rational authority, making sensible decisions rather than submitting to drought or being 'forced' to do something. In the quotes below, this professional image is given even greater salience by contrasting it against more parochial characterisations of beef producers as 'dummies' or 'cockies' (an Australian colloquial term for farmer).

'Challenging the public perception of drought: not all farmers are 'busted cockies with starving animals' – Farmers are concerned the media is focusing too heavily on drought disaster stories that are damaging the reputation of Australia's livestock industry. They also say the majority of farmers are not shooting their animals or letting them starve in paddocks. In recent weeks, stories profiling farmers struggling to feed stock, often showing underweight sheep or cows or even dead livestock, have been headline stories across Australia' (ABC Rural, 6 August 2018).

'As our front page story reveals, producers are no dummies when it comes to managing drought and those facing winter with less than ideal pasture stocks will be busy adjusting their feeding or selling strategies accordingly' (Queensland Country Life, 23 February 2017). Closely aligned with presenting graziers as adopting a professional approach to drought are narratives about how drought can be incorporated into broader management strategies and systems. This process – of 'working with' drought rather than 'against' it – is presented as the means by which graziers can empower themselves in a changeable climate.

'THEY are five inches short of their average summer rainfall and haven't seen run off rain in 22 months, but [property owners] are still smiling. The family run a Droughtmaster and now Senepol-cross cattle operation on their [details removed] property, 80 kilometres from [SEQ region], selling bullocks direct to the meat works. Due to a dry season this year they were forced to sell 'the bottom half' of their steers to feedlots for the first time. This will give the remaining cattle a better chance at finishing off. But, the couple believe their situation would be a lot worse if they hadn't adopted a holistic management system two and a half years ago. Holistic management recognises nature as a whole function and to use it effectively landholders need to work with nature and not against it [property owner] said' (Queensland Country Life, 23 February 2017).

Support through knowledge

Unlike the narratives in the 'Battling adversity' frame that emphasise graziers' adversarial skills to battle with, gamble against, or otherwise endure, drought, the 'managing business risk' frame emphasises the importance of graziers' knowledge in predicting and understanding drought. Specialist knowledge, particularly in the form of scientific and agricultural experts, is a large part of 'managing business risk' discourses and the role of government as a facilitator of drought knowledge and the provision of information and scientific expertise is emphasised.

'Innovative research will be converted into information systems and processes to support Queensland graziers to manage drought and climate challenges more effectively' (Queensland Government website).

Building cultural capital in drought preparation: lessons from discourse analysis

Through a comprehensive and comparative qualitative analysis of media and government accounts of drought within the context of Queensland grazing, this research has found two very different ways of framing drought and its management. The first was more prominent in the media accounts: the 'Battling adversity' frame presents drought as a profoundly difficult climatic event causing disadvantage to Queensland primary producers and rural communities. The discursive strategies used in this frame saw the creation of vivid and visceral stories about hardship and hope, farming families battling, enduring or gambling against drought, and communities rallying to support producers to manage these hardships. The second was less prominent in the media but more prominent in government material analysed. The 'Managing business risk' frame avoids mention of the emotionality and hardship of drought to present it in more neutral terms: as a risk that grazing businesses must manage by adopting a business-like or strategic approach, with broader societal support assistance provided in the form of scientific expertise and knowledge support.

The objective in identifying these two different discursive frames has not been to judge one or the other as better or more accurate, but to gain greater insights into drought as a complex, culturally-mediated phenomenon. There is much to be learned from gaining deep insights into drought discourses in a Queensland context. This can help find ways to build cultures of climate adaptation in agriculture both in Queensland and elsewhere in Australia, and also provide a basis for comparing how different drought discourses play out within Australia and in other countries and cultural settings around the world. The first lesson here lies in acknowledging how entrenched adversarial narratives emphasising producers' resistance and opposition to drought are in Queensland when representing the relationship between drought and agriculture. This is consistent with research by other scholars elsewhere in Australia (e.g. Anderson 2014; Jones 2017; Rickards et al. 2017). These authors point out that an emphasis on drought's agency as an aberrant, negative event works to serve an important cultural function - coalescing social identities around those directly impacted by it, and those who seek to support those who are impacted by it. Although droughts have occurred with regularity in Australia, these drought-as-hardship narratives have played an important role in Australia's cultural development since European settlement. Stories about famously severe droughts, endured hardships and the 'unpredictable' boom-or-bust Australian climate have become enmeshed in rural mythologies and national identities (Anderson 2014). These stories build interest in rural lives and regional issues, and have broader collective appeal at the national level. This is likely to be what makes these stories so attractive to journalists: drought-as-hardship and rallying community narratives make drought relevant and meaningful to audiences well beyond those directly involved and fulfil local and broader communication objectives (Freeman et al. 2017). They also have considerable political salience. As Rickards et al. (2017) points out, divisive cultural framings of climate related issues such as drought and climate variability are often used to gain political favour as community support is mobilised and political sympathy for producers fighting against the impacts of drought is demanded.

Although narratives of drought-as-hardship have powerful cultural effects, there are some concerning issues associated with these narratives when it comes to building a culture of adaptation in agriculture and other rural industries. Hardship narratives tap into and build existing social and cultural capital and reify existing social identities, categories and bonds. However, cultural capital in understandings of drought as an existential threat to agriculture and rural and regional livelihoods may, perversely, work against adaptation and change. As Shtob (2019) points out, narratives that seek to counter hardship and disaster narratives with narratives of survival, continuity and community agency may provoke a satisfying sense of identity and solidarity in communities, but they can also work to close-off the possibilities for alternative actions such as preparing for risks and bringing about actual social change and adaptation in the wake of difficulty and disaster. There is an important question to ask here: as stories around drought as a hardship build interest in rural lives for wider Australian audiences, are they really serving the local community interests they purport to reflect and represent (Bowd 2012; Freeman *et al.* 2017)? A second lesson here is to ensure that mobilisation of broader political and community support and sympathy for producers during drought does not work against longer-term rural autonomy, resilience and sustainability. The media's desire to appeal to and involve broader community sentiments and goodwill should not crowd out impetus for rural communities and industries to implement workable strategies to adapt to drought and climate variability.

Although the 'Battling adversity' discursive frame builds cultural cohesion around the drought-as-hardship narrative, the 'Managing business risk' frame is targeted at individual producers as managers of drought and shifts focus from the emotional and existential aspects of the drought experience. The danger here is that by doing so, these narratives sacrifice the potential to build broader community interest and cultural capital in drought and climate adaptation. Highly rationalised narratives around drought as a business risk and the responsibility of individual enterprises may alienate those who experience and understand drought as a profound difficulty, and may also fail to engage broader communities or galvanise support for agriculture as it prepares for and adapts to drought. In her analysis of native vegetation laws in Australian farming, Bartel (2014) writes how 'disjunctures' (p. 891) can occur between bureaucratic definitions of agricultural landscapes and producers' more nuanced and experiential knowledge of their farming spaces. If these disjunctures become too big they can threaten the perceived legitimacy of environmental laws and contribute to broader regulatory failure. Care must be taken to incorporate more place-based and vernacular forms of farming knowledge into policy processes. The third lesson learned in this discourse analysis indicates something similar: that communication around drought preparation and adaptation should not be so rationalised that this in turn crowds out more sympathetic understandings of the difficulty of drought. Although we need to question the long-term impacts of the 'Battling adversity' discourse, there are important insights to be gleaned from it for building more engaging messages promoting drought preparation. For example, rather than avoiding emotional narratives and downplaying the difficulty of drought with bureaucratic and rational language, we might attempt to align drought preparation with rural values, resilience and identities and thus be better placed to increase cultural capital and interest in it. As well as this, more emotionally evocative words and phrases and more powerful and persuasive rhetoric, narratives and metaphors might be used to paint a more appealing picture of drought preparedness as a desirable social norm. More inclusive and broadly appealing narratives around the importance of drought preparation at a community level might help strengthen cultural capital in the idea of drought management as a social good and a collective responsibility.

Conflicts of interest

The author declares no conflicts of interest.

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