Arguing about coal seam gas: frame conflicts over the future of fracking in Australia

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Framing has become a critical explanatory variable in theories of policy emergence and evolution (e.g., Dudley, 1999; Grant, 2009; Hajer & Laws 2006; Hisschemöller & Hoppe, 1996; Kaufman & Smith, 1999; Laws & Rein, 2003; Rasmussen, 2011; Schmidt, 2006/2013; Scholten & Van Nispen, 2008; Sørensen, 2006; van Eeten, 2001; Yanow, 2009; Peffley and Hurwitz 2007; Baumgartner et al. 2008; Althaus and Kim 2008; Berinsky and Kinder 2006; Sharp and Joslyn 2003; Shah et al. 2002; Baumgartner et al. 2008)

We define *frames* as containing a set of meanings that organize objects and events in relation to a wider context of activity. They are external to the observer, directing one’s attention to particular attributes of an object while deflecting attention from other aspects (Burke 1966, 44–45).

As our interest is in the strategic construction of a set of meanings we focus on communications, rather than in how individuals (cognitively) make meanings for themselves (cf. Entman 1993; Snow and Benford 1988; Goffman 1974).
Our study

- Seeks to:
  - contribute to the literature by examining why policy frames change *over time*
  - struggle for survival *between frames* within an ‘ecology of competing frames’ (van Hulst and Yanow 2014)
  - struggle *between policy actors who sponsor particular frames* (Watts and Maddison 2012; Ferree and Merrill 2000; Ferree et al. 2002)
  - use a novel methodological approach to address this question

- We ask the following questions:
  - **RQ1**: What policy frames are present in these articles?
  - **RQ2**: To what extent has the presence of policy frames changed over time?
  - **RQ3**: What policy actors have supported what frames?
  - **RQ4**: Why have particular policy frames and their presence changed over time?

- We focus on the broadcast media because it remains a central site where actors on multiple sides of a controversial issue are represented and policy actors compete with each other to gain legitimacy and construct core meanings about policy issues (Camson and Wolfsfeld 1993; Carvalho, 2007; Shanahan et al., 2011; Evensen et al., 2014)
Our contribution

- **Conceptual** – provides an account of why policy frames change within a broader ‘ecology of competing frames’ by linking policy frames to those who sponsor them.

- **Methodological** – moves beyond existing studies that select pre-determined time points in which to conduct a frame analysis by combining computational methods with a ‘small-n’ analysis.

- **Empirical** – Topic of CSG regulation dominated by contestation of what is ‘enough’ regulation and over the nature of risks. The representation of actors changes between our three windows of observation. The frames sponsored by policy actors remains relatively constant, although federal politicians (ALP and Coalition) have adopted a common frame (the states are responsible for regulating the CSG industry).
Why do policy frames change?

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<td>Analytical Focus</td>
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<td>Bachrach and Baratz (1962)</td>
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Adapted from Steensland (2008)
There has been broad support for ‘hybrid approaches’ that examine social phenomenon by combining computational and manual methods (Boräng et al. 2014; Lewis et al. 2013)

Computational methods provide researchers with the opportunity to systematically ‘scale up’ the analysis of frames (Van Holt et al., 2012; McNamara, 2005; Grimmer and Stewart 2013; Kluver and Mahoney 2015)

Manual methods provide researchers with the opportunity to provide for contextual sensitivity (Hand and Hillyard 2014; Aipperspach et al. 2006; Lewis et al. 2013)

Existing applications include:
- identifying the impact of interest group frames on public policy outcomes (Kluver and Mahoney 2015)
Research Design

- **Data:**
  - Four national newspaper titles and their weekend editions (The Sydney Morning Herald, The Australian, the Australian Financial Review and The Courier Mail)

- **We used topic modelling** (Latent Dirichlet allocation) to:
  - calculate the estimated topic proportions for each news article in our sample (Roberts and Tingley 2016)
  - select two policy-related topics (from 15) that consistently emerged: topics 11 and 13 – we report findings from one of these topics in this presentation
  - identify ‘spikes’ in coverage of a particular topic (data aggregated daily using a seven day rolling mean)

- **We used manual coding** (NVivo qualitative data analysis software) to identify:
  - ‘named entities’
  - the frame/s deployed by policy sponsors (direct quote and paraphrased)
  - the position taken on CSG by the policy sponsor

- We found a high degree of face validity between the results from the computational methods and the manual coding, which is consistent with other research in this field. It also gives us confidence in the results generated by the computer (Boräng et al. 2014; Lewis et al. 2013)
Distribution of Reporting on Coal Seam Gas by Source
Topic Distribution (seven day rolling mean)
Top frames over Topic 13
Oct 2010 Frames and actors

- Great Artesian Basin
- Science unresolved
- Fear campaign or 'extreme' response against CSG
- Farmer experience with CSG
- Lack of infrastructure
- CSG threat to tourism
- Fracking is not safe
- CSG has negative impacts of rural people
- Community concerns not addressed
- More research needed
- CSG threat to environment
- CSG risks can be managed
- CSG is high risk
- CSG threat to ag land
- CSG means jobs
- CSG is low risk or safe
- Poor planning or development too fast
- Greater regulation needed
- CSG poses health risks
- CSG adequately regulated
- Call for moratorium
- CSG threatens property rights
- CSG risk to water quality or supply

- Farming industry
- State politicians
- Community member
- University
- Farming lobbyist
- Federal politicians
- Independent activists
- Anti-CSG groups
- Industry lobbyist
- Small business
- Local council
- Mining and Energy Industry
- Banking
- Union
- Construction
Feb 2011 Federal politicians frames over window

- CSG is a State issue
- CSG threat to ag land
- CSG as cleaner power
- CSG threatens property rights
- Farmers should be adequately compensated and respected
- CSG is risky strategy for Co2 reduction
- Farmers interests should prevail
- CSG needs federal regulation
- CSG adequately regulated
- Must manage CSG responsibly and be balanced
- CSG exciting export opportunity
Feb 2013 Frames and actors

- CSG causes groundwater contamination
- Community don’t understand CSG
- CSG as feed-stock for local manufacturing
- Science should decide or inform CSG decision
- CSG adequately regulated
- People vs powerful entities
- CSG over regulated
- CSG means jobs
- CSG keeps prices low
- CSG is energy security
- Greater regulation needed
- CSG unwanted by community

- State politicians
- Union
- Federal politicians
- Mining and Energy Industry
- Industry lobbyist
- University
- Scientific Body
- Farming industry
- Community member
- Anti-CSG groups
**Discussion and Conclusion**

- Government and industry actors are the most cited by the press.
  - Coverage focuses on political actors and major stakeholders such as farmers.

- Government actors represent voices both in support of and opposed to CSG development.

- Frame diversity is particularly high among anti-CSG activists and stakeholders.
  - The gas/mining industry tends to have a more stable message throughout.
  - Suggests the anti-CSG campaign is struggling to gain traction.

- Topics exit when there is convergence between actors: the frame diversity and frequency also decreases.
  - This is consistent with previous research showing that a focus on narrative and controversy drives news coverage (Blumler and Gurevitch 1995; Coleman and Blumler 2009; Wanta and Hu 1993).