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Attention to climate change in British newspapers in three attention cycles (1997–2017)

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ABSTRACT

Peaks in climate change newspaper coverage have been attributed to key events, such as major international climate change summits, on the basis that these are reported. This approach overlooks the possibility that unreported events have capacity to focus journalists' and editors' attention on climate change. This study considers the extent to which meteorological and political events – derived externally from what is reported in the media itself (some reported, some not) – coincide with attention to climate change in four UK newspapers. We call these events 'news prompts', since they are potential rather than actual news pegs: some are translated into news stories, others are not. The study brings together literatures on agenda-setting, newsroom practices, and the political economy and ideologies of newspapers. We find that the four newspapers we analyse have responded differently to climate-change related events including international policy events and extreme weather. In recent years, *The Mail, The Telegraph* and *The Times* have been relatively insensitive to climate change news prompts in comparison to the more left-leaning *Guardian*. As climate change coverage increases, so does sensitivity to climate news prompts. This suggests that the ideology of newspapers and the political economy of media outlets may drive climate coverage as much as routine newsgathering practices.

1. Introduction

Environmental politics is dominated by climate change (Connelly et al., 2012), one of the most pressing issues of our time. The way in which it is reported in the media massively shapes public understanding of the issue (Anderson, 1997). It is, therefore, crucial to understand the way in which the press reports climate change. Climate change coverage is the result of a concatenation of agenda setting (local, domestic and international events and problem indicators), newsroom practices and the ideology and political economy of newspapers. Despite the complex recipe that dictates what ends up being published in newspapers, many climate change stories are related to political, ecological or meteorological events (Lester, 2010; Boykoff, 2011). Such events can be thought of as news prompts. A news prompt is an event or action that journalists can *but might not necessarily* use in order to make an issue newsworthy. It is similar to a news peg (Greenberg et al., 1989), which is an event around which a story is pinned. However, whereas pegs always exist in tandem with a published story, a prompt might be thought of an event with the potential (which may or may not be realised) to become a news peg. Without a news peg, climate change in its full complexity struggles to gain media attention (Anderson, 1997: 54).

Scholars have identified that peaks in climate change coverage coincide with political and meteorological events (Achong and Dodds, 2012; Boykoff, 2007; Boykoff and Mansfield, 2008; Wu, 2009; Wagner and Payne, 2017; Stoddart et al., 2015). Boykoff and Mansfield (2008), for example, associate peaks in climate change coverage in the UK tabloid press with floods (October 2000), George Bush's presidential talk, the European Emissions Trading scheme and a G8 meeting (June 2005); and Al Gore's *Inconvenient Truth*, Richard Branson's green economy pledge and the Stern Review (Autumn of 2006). The first – flooding – we label as a meteorological prompt, whereas the others, due to their political nature we label as political ones. Note that the prompts listed above were reported in the press, but did not appear in every article on climate change with which they coincide. Other prompts, we purport, act as prompts without actually being covered.

Certainly the basis for specifying floods as a reason for increases in climate change coverage has, historically, not been clearly established for the British case, although extreme weather has increased coverage

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in Germany (Schäfer et al., 2014). Only 55 of the 1200 headline stories that mention flooding across eight British newspapers (2001–2007) also mention climate change (Gavin et al., 2011: 427). Despite few articles mentioning both flooding and climate change together, we concede that peculiar weather might focus journalists' and editors' attention on to climate change even when the two are not reported in tandem. Thus, even if flooding was not the *actual* peg around which journalists framed their story, it could certainly be viewed as a news prompt, as the German evidence suggests. Although journalists have, historically, been cautious about relating climate change to extreme weather, this has changed in recent years. Since 2011, the link between extreme weather and climate change is now more commonly referred to in scientific, media and public discourse (Nerlich and Jaspal, 2014).

Similar scepticism might be levelled at the alleged relationship between peaks in coverage and the IPCC Fourth Assessment Reports. Only 55 articles across ten British newspapers actually reported on the release and content of these (Hulme, 2009). Contrary to many explanations given, a more forensic examination of data reveals that the peaks in coverage in 112 newspapers across the world in April, July and November 2007 do not neatly coincide with the release of the sections of the IPCC reports (Working Group 1 in February, for Working Group 2 in April and for Working Group 3 in May). Until scholars (e.g. Liu et al., 2011; Schäfer et al., 2014) started modelling the effect of trigger events on climate coverage in the early 2010s, it was difficult to discern a distinct methodological approach for assigning peaks in coverage to prompts.

Similarly to Liu et al. (2011) and Schäfer et al. (2014), we derive a list of news prompts independently from media reporting. Liu et al.'s (2011) study is based on analysis of US papers, whereas Schäfer et al. (2014) compares Australia, Germany and India. In our article, we focus on the British case. We use our list of externally derived political and meteorological news prompts as independent variables in a mixed effects regression model that has monthly media counts of articles with climate change in the title as the dependent variable. This allows us to address a number of research questions hitherto unexplored in the literature. To what extent do newspapers with different ideologies pick up on news prompts? Do political news prompts increase media coverage more than meteorological news prompts? What are the differences in attention given to international news prompts in the broadsheets compared to a tabloid newspaper? And, given that newspapers have expanded their size dramatically over the last decade, is their sensitivity to news prompts changing over time as journalists hunt for stories to fill news gaps?

Our research is relatively novel for studies on climate change coverage. It contributes to the literature in two main ways. First, it builds on studies of agenda setting that have modelled the effect of triggers on coverage (e.g. Liu et al., 2011; Schäfer et al., 2014). We consider the effect of problem indicators (that we here call meteorological prompts) and focusing events (political prompts) on coverage (Kingdon, 1996). We do not additionally include Kingdon's (1996) 'feedback' effects – which refer to pressure from societal actors like NGOs – because these mostly have an amplification effect on problem indicators and focusing events (see Hannigan, 2006:29–33 on the social construction of environmental problems and Section 3). Our key contribution is to add newspapers as a fixed effect in our models, which allows us to see how triggers vary across newspapers with different ideological persuasions. Thus, we bring the agenda-setting literature together with the body of literature on the effect of the ideologies of newspapers on coverage (Carvalho, 2005; Dirikx and Gelders, 2010; Painter and Gavin, 2016). Existing studies on the effect of news prompts have lumped together newspapers with different ideological persuasions. Our focus on four very different UK newspapers fulfils a plea from O'Donnell and Rice (2008:651) that 'future research should compare environmental coverage by newspapers varying in quality and circulation'. Second, in addition to allowing for differentiation in the predictors of climate coverage across newspapers, we extend existing studies on agenda setting in climate change coverage by drawing together literatures on the specific nature of environmental and climate change reporting, journalistic practices, the political economy of newspapers and newsroom practices. Our hypotheses are derived from these literatures and purport that news prompts do not exist in a vacuum to independently shape coverage.

Before addressing these questions, we review relevant literature on environmental journalism, climate change coverage, newsroom practices, the political economy of newspapers, and British newspapers. Alongside the agenda-setting literature, these literatures shape our hypotheses, which we present before turning to our findings, discussion and conclusions.

2. Environmental journalism and climate change newspaper coverage

According to Hansen (2011) there have been three key phases in the study of climate change coverage. These are: (1) the production of environmental journalism (e.g. Schoenfeld et al., 1979); (2) differential coverage of climate change (e.g. Boykoff, 2007); and (3) the social and political implications of climate coverage (e.g. Nisbet, 2009). In this paper we shed some light on all three. Longitudinal mapping of coverage and its relationship to news prompts improves knowledge of the production and construction of news, as well as its implications for public understanding. Production and consumption of news can be thought of as 'cultural circuits', where interpretations of issues co-evolve across public and private spheres (Carvalho, 2010). Our primary emphasis, though, is on *production* of climate change stories rather than consumption.

It is well-known that coverage of the environment has peaks and troughs associated with alarm and realisation of costs, respectively (Downs, 1972; Neuzil, 2008). Whilst coverage of environmental issues clearly goes in waves (if not cycles), Downs has been criticised for treating the environment as a single issue (Lester, 2010). Hiltgartner and Bosk's (1988:5a) public arena model notes how newspaper coverage results from fierce competition for attention among social problems. Kingdon (1996: 406) suggests that issues that are elevated in media agendas have been promoted by 'problem indicators' (e.g. science and the weather), focusing events (e.g. international climate summits) and feedback (e.g. interventions from climate NGOs). Whether climate change gets coverage depends heavily on other issues with which it competes. Implicitly drawing on Hilgartner and Bosk's work, scholars have noted how one environmental story might elevate another environmental story onto the agenda (Mazur, 1998; McGaurr and Lester, 2009).

Climate change received little coverage until the 1980s (Boykoff, 2011: 44–6), only coming into 'full public view' in 1988 (Boykoff, 2011: 48). It was initially framed as a scientific issue drawing on reports and testimonials of scientists like Hansen (NASA) and Schneider (NCAR). Since 1988, it has become increasingly politicised, firstly as a controversial issue, later within the frame of techno-corporatist governance (Carvalho, 2007). The overall quality of environmental journalism in the UK and the US has been assessed as 'poor' partly due to unknowledgeable reporters (O'Donnell and Rice, 2008). Another reason for this negative assessment might be because the aspirations of environmental journalism – for advocacy and speaking truth to power (Frome, 1998) – are stifled by journalistic norms (see Section 3).

Boykoff (2011) suggests that there are three main types of climate change stories: ecological / meteorological, political and scientific. Meteorological events like freak weather are often directly associated