White Rose Research Online

eprints@whiterose.ac.uk
https://eprints.whiterose.ac.uk
Universities of Leeds, Sheffield and York

Deposited via The University of York.

White Rose Research Online URL for this paper:
https://eprints.whiterose.ac.uk/id/eprint/163552/

Version: Published Version

Article:
Graham, Hilary and De Bell, Sian (2020) The representation of future generations in newspaper coverage of climate change: a study of the UK press. Children & Society. ISSN: 1099-0860

https://doi.org/10.1111/chso.12411

Reuse
This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here: https://creativecommons.org/licenses/

Takedown
If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

UNIVERSITY OF LEEDS
University of Sheffield
UNIVERSITY of York

Accepted: 24 June 2020

DOI: 10.1111/chso.12411

ORIGINAL ARTICLE

Children & Society ncb WILEY

The representation of future generations in newspaper coverage of climate change: A study of the UK press

Hilary Graham[1] | **Siân de Bell**[2]

[1]Department of Health Sciences, University of York, York, UK

[2]European Centre for Environment & Human Health, University of Exeter Medical School, Exeter, UK

Correspondence
Hilary Graham, Department of Health Sciences, University of York, York, YO10 5DD, UK.
Email: hilary.graham@york.ac.uk

Funding information
The study draws on the 'Health of Populations and Ecosystems' (HOPE) project, funded by the UK Economic and Social Research Council (ESRC), grant number ES/L003015/1, and is supported by an award from the C & JB Morrell Trust Priming Fund (University of York).

Abstract

Climate change will rob future generations—today's children and those yet to be born—of the stable climate that previous generations have enjoyed. The article explores how future generations are represented in climate change coverage in the UK national press. We examine the 'popular' (Mail, Mirror) and 'quality' (Guardian, Telegraph) press from 2010 to March 2019. We found that little attention was given to future generations; young people rarely spoke and, along with those yet to be born, were represented in ways that obscured the temporal and social inequalities that are built into climate change.

KEYWORDS

children, grandchildren, media, newspapers, rights

INTRODUCTION

Climate change is among the world's most urgent challenges. While changes in the Earth's climate systems have been evident since the 19th century, the pace and scale of change has increased sharply since 1950. Primarily driven by high-income societies, fossil fuel consumption, the major driver of climate change, has increased and, with it, atmospheric carbon dioxide (CO_2) and global temperatures (Hansen et al., 2013; World Meteorological Organization, 2020). The failure to halt the rise in fossil fuel emissions and atmospheric CO_2 means that today's adults risk leaving behind a climate system that places future generations in jeopardy (Steffen, Broadgate, Deutsch, Gaffney, & Ludwig, 2015). It

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.
© 2020 The Authors. *Children & Society* published by National Children's Bureau and John Wiley & Sons Ltd

would be, as Hansen et al. (2013) note, 'an act of extraordinarily witting intergenerational injustice'. The UK is centrally implicated in such an injustice. As the first country to harness fossil fuels to power its economy, the UK is among the top 5 national contributors to global fossil fuel emissions. Because it continues to have high per capita carbon emissions, the UK has made the largest per person contribution to climate change (Matthews et al., 2014). Keen to demonstrate leadership in limiting further climate change, the UK Parliament passed the Climate Change Act (2008), the first legally binding national legislation to reduce future greenhouse gas emissions, with progress reported to Parliament each year (Lorenzoni & Benson, 2014; UK Parliament, 2008).

The UK's Climate Change Act is set within the United Nations Framework Convention on Climate Change (UNFCCC; United Nations (UN), 1992), the world's only global climate governance framework. The UNFCCC was ratified by the majority of nations that also signed the 1989 UN Convention on the Rights of the Child (CRC; United Nations (UN), 1989). The CRC enshrines the rights of children under the age of 18—but not the rights of generations of 'future people' whose lives have yet to begin (Gibbons, 2014; Mulgan, 2008). These future populations are recognised under the UNFCCC, which commits the Parties 'to protect the climate system for the benefit of present *and* future generations of humankind' (United Nations (UN), 1992, Article 3.1; italics added). It might therefore be expected that the 2015 Paris Agreement (United Nations (UN), 2015) would reaffirm this commitment; it was negotiated under the UNFCC with the aim of keeping future increases in global temperatures below the threshold that would threaten future generations. Yet such a commitment is absent from the Paris Agreement (Lewis, 2018). It makes no reference to future generations; 'intergenerational equity' makes one brief appearance in the non-binding preamble to the Paris Agreement, at the end of a long list of obligations which Parties to the Agreement should consider when taking action on climate change (United Nations (UN), 2015). The marginalisation of future generations in the Paris Agreement is in line with their position within the wider public domain. As many studies have noted, those living in the future—both today's children and those yet to be born—lack direct representation in civil society, in policy-making, in electoral systems and in structures of government (Adams & Groves, 2007; Keane, 2013; Thompson, 2010). In all these domains, they rely on adults to speak on their behalf. We focus on these groups. Our category of 'future generations' therefore includes children and young people who, within the societies in which they live, are deemed too young to vote as well those yet to be born.

The mainstream media provides an important forum for adults to engage with climate change (Gavin, 2018; Happer & Philo, 2013; Volmer & Koch-Baumgarten, 2010). It shapes public understanding of climate change, both directly through its influence on its audience and indirectly via its influence on the wider political agenda (Carvalho & Burgess, 2005; Gavin, 2018; Happer & Philo, 2013; Volmer & Koch-Baumgarten, 2010; Weber, 2010).

National newspapers—including the Washington Post (United States of America—USA), the Guardian (United Kingdom—UK) and the Hindustan Times (India)—occupy a central position within this communication system (Boykoff & Luedecke, 2016). The national press has therefore been a focus of media research on climate change (see, e.g. Boykoff, 2011; Carvalho & Burgess, 2005; Gavin, 2009, 2018; Painter & Gavin, 2016). The national press gathers information from other sources (press association services, public relations agencies, scientists, the business sector) and selectively repackages it (Lewis, Williams, & Franklin, 2008); the content is then recycled across their multi-media platforms (e.g. print, online and mobile formats; Doyle, 2015) and through social media (Newsworks, 2019; Pearce, Niederer, Özkula, & Sánchez Querubín, 2019). For example, a study of Twitter, using tweets with the hashtags and keywords 'climate change' and 'global warming', found that two thirds of their web links were to mainstream sources such as newspapers and public broadcasting corporations (Veltri & Atanasova, 2017).

Studies have highlighted three features of press coverage of climate change. Firstly, central to the selective repackaging of information is 'framing', a process through which editors and journalists 'tell the story of climate change' in particular ways (Boykoff, 2008; Carvalho & Burgess, 2005). In countries like the USA and the UK, where national newspapers typically have a strong political slant—for example, broadly supportive of the Republican/Democrat and Conservative/Labour party—this process can result in divergent frames that, for example, accept or question the reality of climate change (Carvalho & Burgess, 2005; O'Neill, Williams, Kurz, Wiersma, & Boykoff, 2015). However, beneath these differences, there can be shared frames that, by their ubiquity, are invisible. For example, frames are constructed by adults in their role as editors and journalists, a practice that both reflects and reproduces the unequal position of future generations in media narratives and in society more broadly. In consequence, children are unable to represent themselves as they would wish to be seen (Holland, 2004). As another example, climate change may be uniformly framed in ways that mask its human dimensions: as an abstract phenomenon happening 'out there' in the atmosphere and divorced from people's lives (Demeritt, 2001). It is therefore important to attend both to what is present and what is obscured in climate change coverage (Molek-Kozakowska, 2018).

Secondly, against a broader trend of increasing press coverage of climate change, media attention is episodic rather than sustained. Coverage is tied to major events in climate governance; it therefore increases around key global events like the 2015 meeting of the Conference of Parties (CoP) to the UNFCCC which produced the Paris Agreement, as well as when major changes in domestic climate change policy are announced (Saunders, Grasso, & Hedges, 2018; Schäfer, Ivanova, & Schmidt, 2014). As a result, media attention is typically short lived. Thirdly, public figures play an important role in these 'spikes' in coverage, which often feature quotes from government leaders, scientists, film and entertainment celebrities, and, in the UK context, members of the royal family. Studies have noted how 'green celebrities' are increasingly featured in media coverage of climate change and in environmental politics more broadly, where they have become key spokespeople and advocates for climate action (Anderson, 2011, 2013; Boykoff & Goodman, 2009).

Given the large body of research on media coverage of climate change (summarised above), we expected to find studies exploring the representation of future generations, a category in which we include the future lives of today's children and young people as well as the lives of those yet to be born. We searched the Web of Science for articles published in English between January 2000 and September 2019. We used search terms for climate change ('climate change' OR 'global warming' OR 'greenhouse gas*' OR 'carbon dioxide' OR 'CO_2') and future generations ('future generations' OR 'next generation' OR 'younger generation' OR 'children' OR 'grandchildren') and the media ('news*' OR 'media' OR 'mass media' OR 'print' OR 'coverage' OR 'press'). We located 284 articles. After screening the titles and abstracts of the articles, and the full text of 14 articles, we found that none focused on coverage of future generations in media reporting on climate change. The largest group of articles described educational initiatives to engage young people in climate and environmental change (Fauville, Säljö, & Dupont, 2013; Karpudewan, Roth, & Abdullah, 2015; Lenti Boero, Clerici, & Perrucci, 2009; Napawan, Simpson, & Snyder, 2017; Salazar & Barroga-Jamias, 2014; Vince Cruz, Espedido, & Abeledo, 2015); this group also included an article exploring the potential for child-to-parent learning (Lawson et al., 2018). A further study focused on how images of children were used in news reporting of natural disasters (Butler, 2013).

Our study addresses the research gap around the representation of future generations in media reporting of climate change. It takes the UK national press as a case study. UK national newspapers have retained their influence in public debate and, via their multi-media platforms, continue to reach large audiences (Happer & Philo, 2013; Newsworks, 2019). The national press is a key source of public information on climate change and gives it greater coverage than television news (Painter &

Gavin, 2016). It consists of what is referred to as the 'popular' press which focuses predominantly on domestic and celebrity news, for example, the Mirror and Daily Mail (hereafter the Mail), and the 'quality' or 'elite' press which provides detailed coverage of national and international events, for example, the Daily Telegraph (hereafter the Telegraph) and the Guardian (Boykoff & Luedecke, 2016; Painter & Gavin, 2016).

The readership of the UK's national press is socially differentiated (Chan & Goldthorpe, 2007; Newsworks, 2019), enabling us to explore the representation of future generations across newspapers oriented to different audiences. The readership of the 'popular' press is drawn from those in routine and manual occupations and with lower formal educational levels, while the 'quality' press appeals primarily to those in non-manual professional and managerial occupations and with higher educational levels (Chan & Goldthorpe, 2007). Within these categories, national newspapers typically have a marked political orientation (Newton & Brynin, 2001). For example, the Mail (https://www.dailymail.co.uk/home/index.html) and Telegraph (https://www.telegraph.co.uk/) typically support the right-of-centre Conservative party, while the Mirror (https://www.mirror.co.uk/) and the Guardian (https://www.theguardian.com/uk) are more likely to support the left-of-centre Labour party. All four newspapers have a weekly multi-platform reach of over 10 million (Telegraph: 11 million; Mirror 13 million; Guardian: 15 million; Mail 19 million) (Newsworks, 2019).

We examine the representation of future generations in climate change coverage of these four newspapers from 2010 to March 2019, focusing on periods where heightened media coverage might be expected. To gain insight into whether, and in what ways, future generations are represented, we explore three dimensions. Firstly, we consider the attention given to future generations. Secondly, in the sub-set of articles referring to future generations, we ask who speaks for them, for example, young people or adults? Thirdly, we consider how future generations are described: what terms are used and what clues, if any, do these give to their identity?

DATA AND METHODS

We used the online newspaper database, Nexis UK, to identify articles published from May 2010 to March 2019 that referred to future generations in the context of climate change. As noted above, we searched the UK 'popular' (Mail, Mirror) and 'quality' (Guardian, Telegraph) press, including online and printed versions, as well as the linked Sunday edition of each paper. We adopted a purposive sampling strategy informed by studies of how media interest in climate change increases at times of heightened political engagement (Saunders et al., 2018; Schäfer et al., 2014). For our target years, we took sampling points designed to capture such periods (see Table 1). Firstly, we selected the 2-week period that encompassed the annual CoP to the UNFCCC, including the days before and during the CoP. Within our 2010–2019 timeframe, the most important and the most extensively covered was CoP21, which resulted in the 2015 Paris Agreement (United Nations (UN), 2015). Secondly, and as additional sampling points, we selected events each year where increased coverage of climate change could be anticipated; the 2-week periods for these events therefore varied across years (see Table 1). In this group, we included UK government-level interventions, including those instituted under the UK Climate Change Act (2008). We also included key UNFCCC-related events that occurred outside the annual CoP periods, including the publication of widely covered reports from the Intergovernmental Panel on Climate Change (IPCC), the UN body that provides the policy community with regular scientific assessments of climate change. Additionally, we included other important interventions in climate change politics, for example, the Pope's Encyclical on the environment and climate change (Catholic Church & Pope Francis, 2015) and the announcement of Donald Trump's

TABLE 1 Selected events and time periods (May 2010–March 2019)

	UNFCCC conference of the parties event	Other climate change-related event
2010	CoP16, Cancun, Mexico/29 Nov−10 Dec	UK Coalition government ('greenest government ever')/14−28 May
2011	CoP17, Durban, South Africa/11 Nov−09 Dec	UK's 4th Carbon Budget published/29 Jun−13 Jul
2012	CoP18, Doha, Qatar/09 Nov−07 Dec	UK's Climate Change Risk Assessment published/25 Jan−08 Feb
2013	CoP19, Warsaw, Poland/26 Oct−23 Nov	UK's National Adaptation Programme/01−15 Jul IPCC report Summary for Policymakers/27 Sep–11 Oct
2014	CoP20 Lima, Peru/14 Nov−12 Dec	IPPC 5th Assessment Report (AR5) Synthesis Report published/02 Nov–16 Nov
2015	CoP21, Paris, France/21 Nov−12 Dec	Pope Francis' Encyclical 'On Care for our Common Home' published/18 Jun−02 Jul
2016	CoP22, Marrakech, Morocco/21 Oct−18 Nov	UK's 5th Carbon Report published/20 Jul–03 Aug
2017	CoP23, Bonn, Germany/20 Oct−17 Nov	UK Climate Change Risk Assessment published/17 Jan- 31 Jan President Trump withdraws USA from Paris Agreement/01−15 Jun
2018	CoP24, Katowice, Poland/16 Nov−14 Dec	First school strike by Greta Thunberg/20 Aug−03 Sept
2019	N/A	First global school strike/15−29 Mar

decision to withdraw the USA from the Paris agreement. For 2018 and the first part of 2019, we chose events that marked the entry of young people into climate change politics. We included the 2 weeks after Greta Thunberg's initial school strike for climate in August 2018 and the first global school strike in March 2019.

In these time periods, we searched for articles with climate change as a major focus. In line with other studies (Media and Climate Change Observatory (MeCCO), 2020), we used the key words 'climate change' and 'global warming', and selected articles where a key word was included in the headline and/or lead paragraph. We included articles directly related to climate change (e.g. covering its environmental impacts or climate policy) and climate change-related articles, where climate change was covered as part of a related focus (e.g. interviews with celebrity activists).

Within this set of articles, we searched for articles that referred to future generations using the key words 'future generations', 'next generation', 'younger generation', 'children' and 'grandchildren'. While we recognise the CRC definition of children as those under the age of 18 years, the articles did not offer details on their definition of children. We were therefore not able to select or filter articles based on an age-based definition of children. We included any article where future generations were linked to climate change, whether by a quoted source (e.g. political leader) or by the article author, and recorded the descriptors used (e.g. 'our children', 'next generation'). We screened out other usages of 'generation' (e.g. energy generation).

Following a detailed reading of the texts, we focused on our three questions. For the attention given to future generations, we noted whether the article on climate change referred to future generations. Where it did, we recorded the proportion of the text referring to them, based on a word count of sentences that included a 'future generations' key word. We also noted the placement of the references and whether future generations were central or marginal to the article's focus. Where removing references to future generations would not have changed the article's focus, for example where politicians mentioned future generations in a speech on climate change policy, we considered their inclusion to be marginal. If removing these references would have changed the focus, we considered them central, for example where the article was about climate change action by young people.

To record the spokespeople for future generations, we used a set of simple descriptors (e.g. article author, political leader, religious leader, scientist, young person). To explore the identity of future generations, we recorded the terms used to describe them (e.g. 'generations to come', 'our grandchildren') and noted if there were other signifiers of their identity.

In the Findings section below, we give examples for each of our three questions. However, because these dimensions of representation are inter-related, examples given to illustrate one dimension also serve to illustrate the others.

FINDINGS

The attention given to future generations in the coverage of climate change

Less than 1 in 10 climate change articles referred to future generations. Across the selected sampling points (Table 1), there were 2,672 articles related to climate change; of these, 216 (8%) referred to future generations. Two of these articles disputed that climate change was happening; both were in the Telegraph.

More than half (53%) of the articles referring to future generations were published in the Guardian, the UK newspaper known for its coverage of environmental issues (Carvalho & Burgess, 2005). A further fifth were in the Telegraph (21%) and the Mail (20%); articles in the Mirror made up 6% of the sub-set. Donald Trump's withdrawal of the USA from the Paris Climate Agreement (in June 2017) caused a spike in climate change coverage referring to future generations: 12% of the articles were linked to this event.

In articles referring to future generations, they occupied a relatively small proportion of the text. We looked for articles giving 20% or more of their text to them—and found that only 4% of articles did. The proportion of such articles was highest in the Mirror (17%) and lowest in the Guardian (2%). As this suggests, most climate change articles referring to future generations gave them little attention. References typically occurred at the beginning or end of the article; few articles made reference to future generations throughout the article (16%). In most articles, they were also marginal to its focus; in the large majority (over 90%) of articles, future generations featured in 'stand-alone' statements that were unintegrated into the content of the article. Again, this pattern was found across the four newspapers. Box 1 includes three examples: the first from an article marking the opening of the 2011 Conference of Parties in Durban, the second on a major climate change report and the third on Donald Trump's decision to pull out of the Paris Agreement.

BOX 1 Little attention given to future generations in climate change coverage

1. Maite Nkoana-Mashabane, South Africa's Minister of International Relations, who is chairing the 12-day, 194-nation meeting [of the CoP in Durban], said the world's poorest countries—many of them in Africa—were dependent on swift action to stave off the catastrophic effects of global warming which affect them most. "We are in Durban with one purpose: to find a common solution that will secure a future to generations to come," she said. But within hours of the summit's start, most of the major players made clear their unwillingness to negotiate their positions… (Laing & Gray, 2011; Telegraph, article length: 608 words).
2. This year is very likely to be the hottest year on record worldwide, the World Meteorological Organisation has said… Temperatures have been 1C above pre-industrial levels, preliminary estimates show. The years 2011–2015 have been the warmest 5-year period on record, with extreme events such as heatwaves influenced by climate change, the UN's weather, water and climate body said…. WMO Secretary-General Michel Jarraud said: … "Greenhouse gas emissions, which are causing climate change, can be controlled," he continued. "We have the knowledge and the tools to act. We have a choice. Future generations will not."… (Beament, 2015; Mirror, article length: 420 words).
3. Donald Trump pulled the United States out of the Paris accord on climate change on Thursday afternoon—deriding it as bad for American jobs and bad for the environment… "We don't want other leaders and other countries laughing at us any more. And they won't be. They won't be," Trump declared. "I was elected to represent the citizens of Pittsburgh, not Paris." … [Barack] Obama issued a statement while the president was still speaking, saying: "A year and a half ago, the world came together in Paris around the first-ever global agreement to set the world on a low-carbon course and protect the world we leave to our children… But even in the absence of American leadership; even as this Administration joins a small handful of nations that reject the future; I'm confident that our states, cities, and businesses will step up and do even more to lead the way, and help protect for future generations the one planet we've got"… (Chambers, 2017; Mail, article length: 3,800 words).

Very rarely were future generations central to the storyline. An example is given below, taken from an article-length personal account written by the journalist (Box 2). For the large majority of articles, as Box 1 illustrates, reference to future generations served to add a human and moral dimension to the main story (a global meeting, a scientific report, a political event).

In summary, our analysis suggested that future generations were marginal to climate change coverage: only a small proportion of articles mentioned them and, when they did, they gave them little attention.

The spokespeople for future generations

Within our study period, only one article (<1% of the total) was authored by young people, written by Greta Thunberg, Anna Taylor and colleagues (Thunberg & Taylor, 2019). In only 5 of the 216 articles (2%) were the perspectives of young people included; in addition to the Thunberg et al. article, four articles reported the views of, or included quotes from, young people (e.g. quotes from a letter from

BOX 2 A rare example of future generations being the focus

1. It was the very personal experience of impending fatherhood, with my partner and I preparing to bring a little girl into the world early this year. Suddenly the period of time that seems directly relevant to me is extended several decades into the future. The experience of becoming completely responsible for a person who will see first-hand the major changes wrought by climate change… That ability for humans to not react emotionally to climate change is undoubtedly one of the things that is making this collective form of species-level suicide possible… It has given me a renewed passion for me to do my part in fighting for a just world for future generations… (Slezak, 2017; Guardian, article length: 908 words).

a youth action group). All but one of these articles appeared in March 2019 and were linked to the global school strike on 15 March.

In the remaining 98% of articles, the authorial voice was adult—and the adults were typically those already in the public eye. In very few instances (4%) were future generations represented by adult members of the general public. Instead, the adults were either the journalists who wrote the article (20%) or, more often, adults with an already-established profile. Thus, future generations were represented via quotes from scientists (13%) and representatives of non-governmental organisations (NGOs) and charities (9%). More frequently, they were current and ex-government leaders (29%), for example, Theresa May, Narendra Modi, Xi Jinping, Francois Hollande, Bill Clinton and Barack Obama, and other public figures (15%) including Mark Zuckerberg, Prince Charles, Stephen Hawkins and Leonardo DiCaprio. Their statements were often repeated across news outlets. For example, the statement by David Cameron (the UK's prime minister at the time) at the 2015 Paris CoP ('What would we have to say to our grandchildren if we fail') was quoted in three of the newspapers in our set (Allen, Woollaston, Tomlinson, Calderwood, & Cohen, 2015; Howard, 2015; Samuel, 2015). Similarly, the statement made by Theresa May (the UK's prime minister at the time) in 2017 when Donald Trump announced the USA's withdrawal from the Paris Agreement ('The Paris Agreement provides the right global framework for protecting the prosperity and security of future generations') was reproduced in the Telegraph (Telegraph reporters, 2017), Mirror (Rkaina, 2017) and Mail (Holmes & Chambers, 2017).

Box 3 provides further examples of how adults with an established public persona become the de facto spokespeople for future generations, given a platform to speak that was rarely made available to young people themselves. As noted with respect to our first question, references to future generations were typically deployed to signal a moral imperative for climate action, one where tackling climate change becomes a question of 'rights' and 'justice' (see also Box 1).

In summary, adults speak for future generations and, in the large majority of articles, the adult spokespeople were those with an already-established public profile.

Identity markers for future generations

While a variety of terms are used to refer to future generations, the terms can be placed in two broad groups. In the first group, future generations are a generalised 'future other', located somewhere in the future. They are 'future generations', 'generations to come', 'coming generations', and 'generations yet to be born'. Such terms featured in 56% of articles. The second set—used in 59%

BOX 3 Well-known adults are the spokespeople for future generations

1. Prince Charles has blamed the catastrophic flooding in Cumbria on a global refusal to combat the 'root cause' of climate change. In a speech to a gathering of global finance chiefs, he attacked 'climate change sceptics' for ignoring an 'accelerating economic, social and environmental disaster', of which the current flooding in the north of England, he claimed, was simply one example….'What right do they have to sacrifice our children and grandchildren's future? Even with overwhelming support, global leaders face a tremendous challenge to respond.' (English, 2015; Mail, article length: 609 words).
2. In the absence of Barack Obama, David Cameron and most developed country leaders (at the 2010 CoP in Cancun), a group of Britain's least-welcome heads of state plans to grab centre-stage at next week's global climate summit and accuse wealthy countries of a collective lack of ambition….Last night the first shots were fired in what are likely to be serious diplomatic clashes at the talks. In an interview with the Guardian, Bolivia's ambassador to the UN accused rich countries of "holding humanity hostage" and undermining the UN. "(Their) deliberate attempts to sideline democracy and justice in the climate debate will be viewed as reckless and immoral by future generations," he said. "I feel that Cancun will become a new Copenhagen if there is no shift in the next few days." (Vidal & Tuckman, 2010; Guardian, article length: 642 words).

of articles—used signifiers that gave future generations a clearer temporal location: they included 'children', 'today's children' and 'the next generation'. Relational identifiers were also used; they included 'my', 'our', and 'your' children and grandchildren and 'children and their children and grandchildren'. As these examples indicate, future generations are typically those living in the 21st century, including those with whom there is a kinship bond. Speakers also used terms from both groups (18%). An example is Obama's widely quoted response to Trump's decision to remove the USA from the Paris Agreement (Box 1, example 3) where he refers both to 'future generations' and to 'our children'.

While references to 'children' and 'grandchildren' implicitly set climate change in a temporal perspective, the implications are rarely articulated. In the coverage of political events, climate change is not located in time. For instance, the speakers in Box 1, examples 1 and 3, refer to 'the catastrophic effects of global warming' and the need to 'protect the world we leave to our children', without giving an indication of the time periods for these effects and the actions needed to protect them. In articles covering scientific reports, the temporalities of climate change are more clearly spelled out. But the dominant unit of measurement is calendar time, not generational time. The climate change timeline runs from past to present ('another record high…levels unprecedented in the past 800,000 years', Box 4, example 1) and reaches forward into the future ('by the end of the century', Box 4, example 2). Rarely is calendar time translated into generational time. The comment from the climate scientist quoted in Box 4, example 2 is one such example. Here, the reference to future generations brings with it a shift in temporal framing, with calendar time translated into generational time: the expert speaker explains that 'the end of the century' means 'well before today's children start drawing their pensions'.

The last sampling point in our study (March 2019) covered the first global school strikes and the entry of young people into climate change politics. In this coverage, national newspapers gave young

BOX 4 Climate change set in calendar time

1. Greenhouse gases in the atmosphere have reached another record high as global warming continues to pick up pace….Last month the Intergovernmental Panel on Climate Change published its fifth assessment report which stated that greenhouse gases have now reached levels unprecedented in the past 800,000 years…. The secretary-general of the WHO (World Meteorological Organisation) said "We need to act now, otherwise we will jeopardise the future of our children, grandchildren and many generations."…. (Collins, 2013; Telegraph, article length: 547 words).
2. The world can expect "severe and pervasive" negative impacts from climate change unless it takes rapid action to cut its greenhouse gas emissions, a United Nations report warns today. Flooding, dangerous heatwaves, ill health and violent conflicts are among the risks if temperatures exceed 3.6F (2C) above pre-industrial levels, the report from the Intergovernmental Panel on Climate Change (IPCC) will say. Continued burning of fossil fuels could lead to temperature increases of between 6.7F (3.7C) and 8.6F (4.8C) by the end of the century, the report warns … Richard Black, of the Energy & Climate Intelligence Unit, said the key question for those finalising the IPCC report was "what to say about the elephant in the room… that if the computer model projections are right, keeping global warming below 2C basically means ending fossil fuel use well before today's children start drawing their pensions" … (Gosden, 2014; Telegraph, article length: 498 words).

people a platform to speak—and they used it to draw attention to the generational inequalities of climate change (Box 5, examples 1 and 2). However, in this period, as in the other periods in our study, the broader social inequalities embedded in climate change were obscured. As the examples in Boxes 1–5 indicate, climate change coverage gave little sense that the future generations most vulnerable to climate change are those living in communities that have contributed least to it. Absent from the coverage of future generations was reference to how, in rich societies like the UK, the future impacts of climate change will disproportionately fall on poorer communities, and, at a global scale, on climate-vulnerable areas of the global south (McMichael, Friel, Nyong, & Corvalan, 2008; Robinson & Shine, 2018).

In summary, a range of terms are used to refer to future generations, including terms like 'our children' that are used to signal the disproportionate impact of climate change on those growing up and growing old through the 21st century. But the broader framing of climate change—whether as an abstract global process or one measured in calendar time—obscures its temporal and social inequalities.

DISCUSSION

Climate change puts the issue of generational inequality into sharp relief (Hansen et al., 2013). The drivers of climate change lie in the economies and lifestyles of societies that have prospered most from the burning of fossil fuels, both in the past and in the present. But the costs are falling forward in time, onto today's children and those yet to be born. The speed and scale of climate action across the next decade will determine the magnitude of these costs. From the perspective of future generations, the current generation of adults 'are failing us' (Thunberg, 2019).

BOX 5 Climate change set in generational time

1. To have any chance of avoiding that extreme danger (going beyond 1.5C) emissions must drop rapidly—so that by the time we will be in our mid- and late-20s we are living in a transformed world. Those who are under 20 now could be around to see 2080, and face the prospect of a world that has warmed by up to 4C. The effects would be utterly devastating. (Thunberg, G., Taylor, A and others, 2019; Guardian, article length 1,149 words).
2. Greta Breveglieri, 21, a political science student at Univesita Statale Di Milano, travelled from Italy for the London demonstration today. She said… "To put it bluntly, we're here because our world is going to be destroyed. We have to change the pace of our culture, our society, our politics, our economics. We have been silent for too long." … Anna Taylor, 17, from north London, co-founder of the UK Student Climate Network and one of the organisers of the Youth Strike 4 Climate movement, said the Government was failing to recognise the severity of the crisis… "We're here because we feel betrayed [by the political establishment] and we don't feel we can trust them to protect our future, which is why we're having to go on strike to make our voices heard … It's something we all feel very passionate about, because it's personal to us, it's about our future". (Elsom, 2019; Mail, article length: 1,148 words).

National newspapers, and the media system as whole, help to shape public understanding of, and engagement with, climate change. Yet we found no studies of the representation of future generations in climate change coverage. To address this gap, we focused on the UK, a high-income and high-emitting country where the national press retains its centrality within the national media system. The four selected newspapers reflect the divergences in format and political orientation that characterise the UK newspaper sector and each reaches a wide audience through their print and online platforms.

Our study provides an initial analysis of UK press coverage of future generations and climate change. A more comprehensive analysis would include a broader range of newspapers, both national and local, and a larger set of sampling points. While studies suggest that coverage of climate change is closely tied to major political events (Saunders et al., 2018; Schäfer et al., 2014), this larger set could include coverage of extreme weather events, such as flooding and heatwaves.

Extending the timeframe of the study would also be a priority. Coverage of the March 2019 school strikes pointed to a reframing of climate change around its inter-generational inequalities; however, it is not clear whether this reframing will persist and strengthen, with newspapers enabling young people—including those living in the poorer regions of the global south—to speak directly to the public about their concerns. Or if, in line with patterns evident up to March 2019, a media platform will be made available only to those from high-income societies who have established a strong public profile, like Greta Thunberg.

Based on the Nexis database, our study focused on newspaper text only. For future studies, it would be important to include other media platforms and visual content (Kalhoefer, 2018; Pearce et al., 2019). Such wider sources would also enable our findings to be contextualised in what is recognised to be a fast-changing media landscape. Important, too, would be the participation of both young people and adults who will become the parents of future generations in the study design and analysis. As in other media studies of climate change, their views were not integrated into our study.

Nonetheless, some conclusions can be drawn from our study. Firstly, it suggests that, at least until March 2019, future generations were marginal to coverage of climate change in the UK press. Only a small proportion of climate change articles referred to them; such references were minimal and largely tangential to the main focus of the article. These references served to animate reports of political events and scientific

evidence. In particular, future generations were invoked to put a human face on climate change and provide an ethical case for action. Secondly, in this marginal form, the perspectives and interests of future generations were represented by adults. The voices and views of children and young people were largely absent from climate change coverage. As in other public domains, adults 'stood in' for future generations, speaking on behalf of those whose lives they may never share (Partridge, 2001). The adults who assumed this proxy role were typically those with celebrity status; as Anderson (2011) observes, celebrities provide a 'human interest' hook through which to engage readers in articles which they might not otherwise read. Celebrity endorsement is not unique to climate change coverage; as other studies note, celebrities serve to 'deliver media attention' to social causes that might otherwise be ignored (Bell, 2013).

Thirdly, future generations were often described in terms that gave little clue to their identity. They were 'generations to come' and 'yet to be born'. However, even when they were accorded a clearer identity—as 'your children', 'our descendants' 'their relatives'—the treatment of time served to mask their position and perspectives. Climate change was very rarely described in generational time. Only a few articles translated climate change into the lifetimes of future generations ('keeping global warming below 2°C basically means ending fossil fuel use well before today's children start drawing their pensions', 'those who are under 20 now could be around to see 2080'). We found no articles where references to future generations were set within the broader social inequalities of climate change, as a process driven by high-income societies that will disproportionately affect future generations in disadvantaged communities in the global north and, on a larger scale, in the global south, the world region that is home to the majority of today's children (World Bank, 2019).

CONCLUSIONS

The continued increase in carbon emissions and global temperatures mean that today's and tomorrow's children will live on a planet very different to the one the current generation of adults have taken for granted. Focusing on the UK press from May 2010 to March 2019, we investigated whether and how future generations are represented in this important public domain. Our analysis pointed to their marginal position. In the minority of articles referring to them, adults with an established media profile provided 'soundbites' on the moral imperative of taking action on climate action for future generations, but within articles that in other respects denied them a voice.

Along with social movements like the youth climate change movement, the media has the potential to change the public conversation about climate change. Our study uncovered examples of media reporting that point to the potential for reframing climate change from the perspective of future generations. Key features of this reframing would include self-representation, with young people serving as their own spokespeople (and ideally selecting the speakers and the quotes). Newspaper style guides (e.g. Marsh & Marshall, 2004) could be adapted to facilitate this process, with international agencies committed to empowering young people—for example the UN's World Programme for Action for Youth (United Nations (UN), 2010)—providing leadership and support. It would also include a shift in the temporal framing of climate change, from calendar time to personal and generational time. In addition, our study has pointed to absent features that should be central to good media practice. Here, we would highlight the need to set the inter-generational inequalities of climate change in their wider social context. While the high-carbon lifestyles of high-income countries will continue to alter the climate system for all generations to come, it is future generations living in communities with fewest resources and least institutional capacity who will be hardest hit.

ACKNOWLEDGEMENTS

The study is informed by the 'Health of Populations and Ecosystems' (HOPE) project, funded by the UK Economic and Social Research Council (ESRC), grant number ES/L003015/1, and was supported by an award from the C & JB Morrell Trust Priming Fund (University of York). We also wish to acknowledge the support of Neil Carter and Piran White for the study.

ORCID

Hilary Graham https://orcid.org/0000-0001-7949-6819
Siân de Bell https://orcid.org/0000-0001-7356-3849

REFERENCES

Adams, B., & Groves, C. (2007). *Future matters: Action, knowledge, and ethics*. Leiden, The Netherlands: Brill.

Allen, P., Woollaston, V., Tomlinson, S., Calderwood, I., & Cohen, T. (2015). How would we explain it to our grandchildren?': David Cameron and Prince Charles call on largest-ever gathering of world leaders to take action at historic climate summit in Paris. MailOnline. 01 December. Retrieved from https://www.dailymail.co.uk/news/article-3339151/Hollande-welcomes-Obama-amid-unprecedented-security-operation-150-world-leaders-meet-Paris-thrash-climate-change-deal.html

Anderson, A. (2011). Sources, media, and modes of climate change communication: The role of celebrities. *Wiley Interdisciplinary Reviews: Climate Change*, *2*, 535–546.

Anderson, A. (2013). 'Together we can save the arctic': Celebrity advocacy and the Rio Earth Summit 2012. *Celebrity Studies*, *4*, 339–352. https://doi.org/10.1080/19392397.2013.831617

Beament, E. (2015). 2015 set to be hottest year on record worldwide 'thanks to global warming and El Nino. Mirror [Online]. 25 November. Retrieved from https://www.mirror.co.uk/news/uk-news/2015-set-hottest-year-record-6896768

Bell, K. (2013). Raising Africa? Celebrity and the rhetoric of the White Saviour. *Journal of Multidisciplinary International Studies*, *10*. https://doi.org/10.5130/portal.v10i1.3185

Boykoff, M. T. (2008). The cultural politics of climate change discourse in UK tabloids. *Political Geography*, *27*, 549–569. https://doi.org/10.1016/j.polgeo.2008.05.002

Boykoff, M. T. (2011). *Who speaks for the climate? Making sense of media reporting on climate change*. New York: Cambridge University Press.

Boykoff, M. T., & Goodman, M. K. (2009). Conspicuous redemption? Reflections on the promises and perils of the 'celebritization' of climate change. *Geoforum*, *40*, 395–406. https://doi.org/10.1016/j.geoforum.2008.04.006

Boykoff, M., & Luedecke, G. (2016). Elite news coverage of climate change. *Oxford Research Encyclopedia of Climate Science*. https://doi.org/10.1093/acrefore/9780190228620.013.357

Butler, R. (2013). Images of the child and environmental risk: Australian news photography of children and natural disasters, 2010–2011. *Visual Studies*, *28*, 148–160. https://doi.org/10.1080/1472586X.2013.801637

Carvalho, A., & Burgess, J. (2005). Cultural circuits of climate change in UK broadsheet newspapers, 1985–2003. *Risk Analysis*, *25*, 1457–1469. https://doi.org/10.1111/j.1539-6924.2005.00692.x

Catholic Church, & Pope Francis. (2015). *Encyclical Letter Laudato Si' of the Holy Father Francis on care for our common home*. Rome: St Pauls Publications. Retrieved from https://earthministry.org/wp-content/uploads/2015/05/Laudato-Si.pdf

Chambers, F. (2017). I represent the people of Pittsburgh NOT Paris. MailOnline [Online]. 1 June. Retrieved from https://www.dailymail.co.uk/news/article-4563932/Trump-announces-U-S-Paris-climate-accord.html

Chan, T. W., & Goldthorpe, J. H. (2007). Social status and newspaper readership. *American Journal of Sociology*, *112*, 1095–1134. https://doi.org/10.1086/508792

Collins, N. (2013). Greenhouse gases at record high, UN weather agency says. *The Telegraph* [Online]. 6 November. Retrieved from https://www.telegraph.co.uk/news/earth/environment/globalwarming/10430734/Greenhouse-gases-at-record-high-UN-weather-agency-says.html

Demeritt, D. (2001). The construction of global warming and the politics of science. *Annals of the Association of American Geographers*, *91*, 307–337. https://doi.org/10.1111/0004-5608.00245

Doyle, G. (2015). Multi-platform media and the miracle of the loaves and fishes. *Journal of Media Business Studies*, *12*, 49–65. https://doi.org/10.1080/16522354.2015.1027113

Elsom, J. (2019). Police arrest eight at UK student 'strike' over climate change as hundreds of teenagers protest peacefully as they joined thousands across the globe to stage second walkout of lessons. MailOnline [Online]. 15 March. Retrieved from https://www.dailymail.co.uk/news/article-6813353/Hundreds-UK-students-joined-thousands-globe-climate-change-protest.html

English, R. (2015). How climate cynics risk our future, by Charles. The Mail. 11 December. Retrieved from https://www.dailymail.co.uk/news/article-3355386/How-climate-cynics-risk-future-Charles-Prince-uses-speech-say-Cumbrian-floods-example-failure-tackle-root-cause-global-warming.html

Fauville, G., Säljö, R., & Dupont, S. (2013). Impact of ocean acidification on marine ecosystems: Educational challenges and innovations. *Marine Biology*, *160*, 1863–1874. https://doi.org/10.1007/s00227-012-1943-4

Gavin, N. T. (2009). Addressing climate change: A media perspective. *Environmental Politics*, *18*, 765–780. https://doi.org/10.1080/09644010903157081

Gavin, N. T. (2018). Media definitely do matter: Brexit, immigration, climate change and beyond. *British Journal of Politics and International Relations*, *20*, 827–845. https://doi.org/10.1177/1369148118799260

Gibbons, E. D. (2014). Climate change, children's rights, and the pursuit of intergenerational climate justice. *Health and Human Rights Journal*, *16*, 19–31.

Gosden, E. (2014). UN climate change report to warn of 'severe, pervasive' effects of global warming. *The Telegraph* [Online]. 2 November. Retrieved from https://www.telegraph.co.uk/news/earth/environment/climatechange/11202987/UN-climate-change-report-to-warn-of-severe-pervasive-effects-of-global-warming.html

Hansen, J., Kharecha, P., Sato, M., Masson-Delmotte, V., Ackerman, F., Beerling, D. J., … Zachos, J. C. (2013). Assessing "dangerous climate change": Required reduction of carbon emissions to protect young people, future generations and nature. *PLoS One*, *8*, e81648. https://doi.org/10.1371/journal.pone.0081648

Happer, C., & Philo, G. (2013). The role of the media in the construction of public belief and social change. *Journal of Social and Political Psychology*, *1*, 321–336. https://doi.org/10.5964/jspp.v1i1.96

Holland, P. (2004). *Picturing childhood: The myth of the child in popular imagery*. London: I.B. Tauris.

Holmes, S., & Chambers, F. (2017). 'Don't worry, be happy': Putin refuses to condemn Trump over Paris climate change accord as a German newspaper prints 'Earth to Trump: F*** you!' and Europe and China vow to uphold the 'hard-won' agreement'. MailOnline. 02 June. Retrieved from https://www.dailymail.co.uk/news/article-4565498/The-world-unites-condemn-Donald-Trump-Paris-agreement.html

Howard, E. (2015). COP21: the best metaphors from the Paris climate talks. *The Guardian*. 01 December. Retrieved from https://www.theguardian.com/environment/2015/dec/01/cop21-the-best-climate-metaphors-from-paris

Kalhoefer, K. (2018). *How broadcast TV networks covered climate change in 2017 [Online]*. Washington: Media Matters for America. Retrieved from https://www.scribd.com/document/371346832/How-Broadcast-TV-Networks-Covered-Climate-Change-in-2017

Karpudewan, M., Roth, W.-M., & Abdullah, M. N. S. B. (2015). Enhancing primary school students' knowledge about global warming and environmental attitude using climate change activities. *International Journal of Science Education*, *37*, 31–54. https://doi.org/10.1080/09500693.2014.958600

Keane, J. (2013). Children and civil society. In J. Nautz, P. Ginsborg, & T. Nijhuis (Eds.), *The Golden Chain: Family, civil society and the state*. New York, NY: Berghahn Books.

Laing, A., & Gray, L. (2011). Durban climate change conference opens in disarray. *The Telegraph* [Online]. 28 November. Retrieved from https://www.telegraph.co.uk/news/earth/environment/climatechange/8921491/Durban-Climate-Change-Conference-2011-opens-in-disarray.html

Lawson, D. F., Stevenson, K. T., Peterson, M. N., Carrier, S. J., Strnad, R., & Seekamp, E. (2018). Intergenerational learning: Are children key in spurring climate action? *Global Environmental Change*, *53*, 204–208. https://doi.org/10.1016/j.gloenvcha.2018.10.002

Lenti Boero, D., Clerici, T., & Perrucci, V. (2009). Children and marmots: A pilot study in mountain primary schools. *Ethology Ecology & Evolution*, *21*, 415–427. https://doi.org/10.1080/08927014.2009.9522496

Lewis, B. (2018). The rights of future generations within the post-Paris climate regime. *Transnational Environmental Law*, *7*, 69–87. https://doi.org/10.1017/s2047102517000243

Lewis, J., Williams, A., & Franklin, B. (2008). A compromised fourth estate? *Journalism Studies*, *9*, 1–20. https://doi.org/10.1080/14616700701767974

Lorenzoni, I., & Benson, D. J. G. E. C. (2014). Radical institutional change in environmental governance: Explaining the origins of the UK Climate Change Act 2008 through discursive and streams perspectives. *Global Environmental Change*, *29*, 10–21. https://doi.org/10.1016/j.gloenvcha.2014.07.011

Marsh, D., & Marshall, N. (2004). *Guardian Style Guide*, London: Guardian Newspapers Limited. Retrieved from http://image.guardian.co.uk/sys-files/Guardian/documents/2004/07/15/styleguidepdfjuly2004.pdf

Matthews, H. D., Graham, T. L., Keverian, S., Lamontagne, C., Seto, D., & Smith, T. J. J. E. R. L. (2014). National contributions to observed global warming. *Environmental Research Letters*, *9*, 014010. https://doi.org/10.1088/1748-9326/9/1/014010

McMichael, A. J., Friel, S., Nyong, A., & Corvalan, C. J. B. (2008). Global environmental change and health: Impacts, inequalities, and the health sector. *BMJ*, *336*, 191–194. https://doi.org/10.1136/bmj.39392.473727.AD

MeCCO. (2020). *MeCCO statement of method*, University of Colorado Boulder, USA: Media and Climate Change Observatory. Retrieved from https://sciencepolicy.colorado.edu/icecaps/research/media_coverage/method.html

Molek-Kozakowska, K. (2018). Popularity-driven science journalism and climate change: A critical discourse analysis of the unsaid. *Discourse, Context & Media*, *21*, 73–81. https://doi.org/10.1016/j.dcm.2017.09.013

Mulgan, T. (2008). *Future people*. Oxford: Oxford University Press.

Napawan, N. C., Simpson, S.-A., & Snyder, B. (2017). Engaging youth in climate resilience planning with social media: Lessons from# OurChangingClimate. *Urban Planning*, *2*, 51–63.

Newsworks. (2019). *Readership 2018: The latest UK newsbrand readership data from PAMCo [Online]*. Retrieved from https://www.newsworks.org.uk/search?q=readership

Newton, K., & Brynin, M. (2001). The national press and party voting in the UK. *Political Studies*, *49*, 265–285. https://doi.org/10.1111/1467-9248.00313

O'Neill, S., Williams, H. T., Kurz, T., Wiersma, B., & Boykoff, M. (2015). Dominant frames in legacy and social media coverage of the IPCC Fifth Assessment Report. *Nature Climate Change*, *5*, 380. https://doi.org/10.1038/nclimate2535

Painter, J., & Gavin, N. T. (2016). Climate skepticism in British newspapers, 2007–2011. *Environmental Communication*, *10*, 432–452. https://doi.org/10.1080/17524032.2014.995193

Partridge, E. (2001). Future generations. In E. Partridge (Ed.), *A companion to environmental philosophy* (pp. 377–389). Oxford: Blackwell Publishing.

Pearce, W., Niederer, S., Özkula, S. M., & Sánchez Querubín, N. (2019). The social media life of climate change: Platforms, publics, and future imaginaries. *Wiley Interdisciplinary Reviews: Climate Change*, *10*, e569.

Rkaina, S. (2017). Donald Trump pulls US out of Paris climate change agreement - then immediately announces America may come back in'. *Mirror*. 2 June. Retrieved from https://www.mirror.co.uk/news/world-news/donald-trump-pulls-out-paris-10543689

Robinson, M., & Shine, T. J. N. C. C. (2018). Achieving a climate justice pathway to 1.5 C. *Nature Climate Change*, *8*, 564. https://doi.org/10.1038/s41558-018-0189-7

Salazar, J. M. L., & Barroga-Jamias, S. (2014). YouTube for the environment: Characteristics, themes and communication approaches of Philippine biodiversity videos. *Asia Life Sciences*, *23*, 267–284.

Samuel, H. (2015). We have no more climate excuses, Cameron warns Paris summit. *The Telegraph* (p. 16–.). 1 December, Retrieved from https://www.telegraph.co.uk/archive/2015-12-1.html

Saunders, C., Grasso, M. T., & Hedges, C. (2018). Attention to climate change in British newspapers in three attention cycles (1997–2017). *Geoforum*, *94*, 94–102. https://doi.org/10.1016/j.geoforum.2018.05.024

Schäfer, M. S., Ivanova, A., & Schmidt, A. (2014). What drives media attention for climate change? Explaining issue attention in Australian, German and Indian print media from 1996 to 2010. *International Communication Gazette*, *76*, 152–176. https://doi.org/10.1177/1748048513504169

Slezak, M. (2017). Writing about climate change: my professional detachment has finally turned to panic. *The Guardian* [Online]. 19 January. Retrieved from https://www.theguardian.com/environment/commentisfree/2017/jan/20/writing-about-climate-change-my-professional-detachment-has-finally-turned-to-panic

Steffen, W., Broadgate, W., Deutsch, L., Gaffney, O., & Ludwig, C. (2015). The trajectory of the Anthropocene: The Great Acceleration. *The Anthropocene Review*, *2*, 81–98. https://doi.org/10.1177/2053019614564785

Telegraph reporters. (2017). Theresa May tells Donald Trump of 'disappointment' over decision to pull out of Paris climate change accord. *The Telegraph*. 01 June. Retrieved from https://www.telegraph.co.uk/news/2017/06/01/theresa-may-tells-donald-trump-disappointment-decision-pull/

Thompson, D. F. (2010). Representing future generations: Political presentism and democratic trusteeship. *Critical Review of International Social and Political Philosophy*, *13*, 17–37. https://doi.org/10.1080/13698230903326232

Thunberg, G. (2019). *Speech delivered to the UN Climate Action summit, 23 September 2019* . Washington DC, USA: National Public Radio Inc. https://text.npr.org/s.php?sId=763452863.

Thunberg, G., Taylor, A., Neubauer, L., Gantois, K., De Wever, A., Charlier, A., Gillibrand, H., & Villasenor, H. (2019). Think we should be at school? Today's climate strike is the biggest lesson of all. *The Guardian* [Online]. 15 March. Retrieved from https://www.theguardian.com/commentisfree/2019/mar/15/school-climate-strike-greta-thunberg

UK Parliament. (2008). *Climate Change Act 2008*. London: The Stationery Office Limited. Retrieved from http://www.legislation.gov.uk/ukpga/2008/27/pdfs/ukpga_20080027_en.pdf

United Nations (UN). (1989). *Convention on the Rights of the Child*, Geneva: Office of the United Nations High Commissioner for Human Rights (OHCHR) . [Online]. Retrieved from https://www.ohchr.org/en/professionalinterest/pages/crc.aspx

United Nations (UN). (1992). *United Nations Framework Convention on Climate Change (UNFCCC)*, New York: United Nations. Retrieved from https://unfccc.int/resource/docs/convkp/conveng.pdf

United Nations (UN). (2010). *World Programme for Action for Youth*, New York: United Nations. Retrieved from https://www.un.org/esa/socdev/unyin/documents/wpay2010.pdf

United Nations (UN). (2015). *Paris Agreement*, New York: United Nations [Online]. Retrieved from https://unfccc.int/sites/default/files/english_paris_agreement.pdf

Veltri, G. A., & Atanasova, D. (2017). Climate change on Twitter: Content, media ecology and information sharing behaviour. *Public Understanding of Science*, *26*, 721–737.

Vidal, J., & Tuckman, J. (2010). Cancún climate summit: Rich accused of 'holding humanity hostage'. *The Guardian* [Online]. 27 November. Retrieved from https://www.theguardian.com/environment/2010/nov/26/cancun-climate-summit-humantiy-hostage

Vince Cruz, C. C. E., Espedido, F. A. V. C., & Abeledo, R. B. (2015). Shaping minds to action: An evaluation of the environmental influences of primary school students in an urbanizing community. *Environment, Development and Sustainability*, *17*, 641–652. https://doi.org/10.1007/s10668-014-9551-8

Volmer, K., & Koch-Baumgarten, S. (2010). Introduction: Mass media and public policy - is there a link? In S. Koch-Baumgarten & K. Voltmer (Eds.), *Public policy and the mass media* (pp. 1–15). London, UK: Routledge.

Weber, E. U. (2010). What shapes perceptions of climate change? *Wiley Interdisciplinary Reviews: Climate Change*, *1*, 332–342.

World Bank. (2019). *Population ages 0–14, total* [Online]. Retrieved from https://data.worldbank.org/indicator/sp.pop.0014.to.zs

World Meteorological Organization. (2020). *WMO Statement on the State of the Global Climate in 2019*, WMO No1248. Geneva: WMO. https://library.wmo.int/index.php?lvl=notice_display&id=21700#.XwibpW5FyUk

AUTHOR BIOGRAPHIES

Hilary Graham has a background in sociology and social policy. She has a track record of research on the health of children and families. Her current research is concerned with the human dimensions of climate change, with a particular focus on the implications of climate change for children living today and those yet to be born.

Siân de Bell has a background in biology and environmental change. Her PhD investigated the benefits of blue space for ecosystem health and human wellbeing. She is currently working on the 'Informing environmental investment for health and wellbeing' project, which is funded by the UK's South West Partnership for Environment and Economic Prosperity (SWEEP).

How to cite this article: Graham H, de Bell S. The representation of future generations in newspaper coverage of climate change: A study of the UK press. *Child Soc*. 2020;00:1–16. https://doi.org/10.1111/chso.12411