

This item is the archived peer-reviewed author-version of:

Working mechanically or organically? Climate change journalist and news frames in mainstream and alternative media

Reference:

Moernaut Renée, Mast Jelle, Pauwels Luc.- Working mechanically or organically? Climate change journalist and news frames in mainstream and alternative media Journalism practice - ISSN 1751-2794 - (2017), p. 1-21
Full text (Publisher's DOI): <https://doi.org/10.1080/17512786.2017.1387070>
To cite this reference: <https://hdl.handle.net/10067/1475780151162165141>

WORKING MECHANICALLY OR ORGANICALLY? Climate Change Journalist and News Frames in Mainstream and Alternative Media

Renée Moernaut (corresponding author)

Vrije Universiteit Brussel, Department of Linguistics and Literary Studies (Applied Linguistics), Brussels (Belgium)

University of Antwerp, Department of Communication Studies, Belgium

renee.moernaut@vub.be

Pleinlaan 5 (room 308), 1050 Brussels (Elsene), BELGIUM

+32-2-6291110

orcid.org/0000-0001-9628-7525

@ReneeMoernaut

Jelle Mast

Vrije Universiteit Brussel, Department of Linguistics and Literary Studies (Applied Linguistics), Brussels (Belgium)

jelle.mast@vub.be

Pleinlaan 5 (room 308), 1050 Brussels (Elsene), BELGIUM

+32-2-6291110

orcid.org/0000-0002-4939-1458

<http://www.vub.ac.be/en/people/jelle-mast>

Luc Pauwels

University of Antwerp, Department of Communication Studies, Belgium

luc.pauwels@uantwerpen.be

Sint-Jacobsstraat 2, S.M.479, 2000 Antwerp (Belgium)

+32-3-2655684

orcid.org/0000-0003-0478-9582

www.uantwerpen.be/en/staff/lucpauwels/

WORKING MECHANICALLY OR ORGANICALLY?

Climate Change Journalist and News Frames in Mainstream and Alternative Media

Climate change frames in the media affect the political and public debate (e.g., Entman et al. 2009; Graber 1988). However, focusing on the frames in texts, most framing research overlooks the factors which influence frame-building by reporters. However, this is crucial for a fuller understanding of the potential implications and meanings of frames. Besides, the existing frame-building research is exclusively engaged with mainstream media. Also, visual frame-building is under-researched. Therefore, we have conducted interviews with 26 climate journalists, photo editors, chiefs and opinion-makers, working for three mainstream and two progressive alternative outlets in northern Belgium. The findings were combined with the outcome of a deductive framing analysis of 114 climate articles. The results show a strong overlap among journalist frames and news frames. Anthropocentric Subframes prevail in the mainstream news articles and among the reporters. A mixture of Biocentric and Anthropocentric Subframes was found in the context of the alternative outlets. We explain this presenting the studied mainstream newsrooms as machines and the (progressive) alternative newsrooms as organisms. We conclude that the mainstream journalists are guided towards Anthropocentric Subframes by various (internalised) pressures. The practices in the alternative media liberate reporters to introduce a broader variety of frames.

KEYWORDS Climate change; frame-building; ideology; journalist frames; news frames; newsroom organisation; news values

1 Introduction

In today's global village, the media constitute a major source of information about far-away places, people or events. The media inform us, for instance, about climate change, which many people (in the global West) have little first-hand experience with. Media frames are, however, far from neutral. Depending on the frames we are presented with, we are likely to think and talk about, or act upon, *the* global threat of the 21st century in different ways (Entman et al. 2009).

Framing is a process, encompassing frame-building by communicators, the frame in communication and audience interpretations (Entman et al. 2009). Nevertheless, the majority of the framing studies focus on the frames in (media) communication (news frames). However, to fully understand news frames, underlying power struggles (Carragee and Roefs 2004) and potential implications, we must incorporate frame-building into framing research. After all, reporters are affected by various interacting influences (Shoemaker and Reese 2014).

Journalist are often considered as nucleus in frame-building (Boesman et al. 2017; Vossen et al. 2017). Engesser and Brüggemann (2016) reconstructed the (cognitive) journalist frames of climate reporters, considering these as major influences in their media coverage. The authors also called for further validation of the journalist frames through qualitative approaches. Also, they argued that “[f]uture studies should combine interviews with journalists and analyses of their articles in order to further investigate their role as secondary definers of social issues” (Engesser

and Brüggemann 2016, 838). The study of Vossen et al. (2017) on poverty reporting is the first to respond to this call, and partly informed our study.

Previous research demonstrated interesting differences among mainstream and progressive alternative media, like the prevalence of Anthropocentric climate change Subframes in mainstream media and a mixture of Anthropocentric and Biocentric Subframes in the alternative media (Moernaut, Mast and Pauwels in press). While the former are denounced for depoliticising the climate debate, the latter are said to facilitate repoliticisation, allowing for constructive interactions (Pepermans and Maesele 2014). It remains unclear, however, which influences help to give rise to these alternative frames.

With a few exceptions (Dan 2017; Nurmis 2017), visual frame-building has also been overlooked. Visual frames have a particularly strong influence on audience perceptions (Graber 1988). Besides, they have been connected to the practices of selection and construction characteristic for the photographic gatekeeping process (Nurmis 2017). Hence, further empirical research is required.

Therefore, the scientific purpose of this research is to examine the major influences which help to explain the differing multimodal media frames produced by mainstream and progressive alternative media. We will consider individual journalists, and their (cognitive) journalist frames, as nexus in the frame-building process. Our discussion will draw on a thematic content analysis of interviews (n=26), combined with a deductive framing analysis of climate change articles (n=114). Three mainstream and two alternative northern Belgian outlets were selected.

2 Frames and Framing

A frame is an immanent structuring idea which gives coherence and meaning to texts or cognitive processes. Framing, then, is applying a frame to structure an area of life: It involves selecting, omitting, expanding and giving salience to certain aspects of a perceived reality, providing context and suggesting a particular problem definition, causal responsibility, moral evaluation, and/or treatment recommendation (Entman 2004; Gamson and Modigliani 1989; Van Gorp 2006). Framing encompasses frame-building, for instance by professional communicators like journalists, and frame effects on recipients. Accordingly, frames can be found in a number of areas (Entman et al. 2009; Scheufele 2006). Interest groups, journalists and audiences have cognitive frames, which help them to process information: Interest group frames, journalist frames, beat and newsroom frames (more or less shared among journalists working in a news beat or a newsroom) and audience frames. Frames become manifest when they are used to structure texts like news reports (news frames). The various frames influence each other (in feedback processes). As such, they also give shape to the overarching stock of cultural frames, people choose from *and* are restrained by (Gamson and Modigliani 1989; Van Gorp 2006).

Cognitive frames result from cultural frames and interactions with other communicators ('frames) but are also influenced by personal attitudes, experiences and views (Engesser and Brüggemann 2016). Scheufele (2006) argues, accordingly, that cognitive frames draw on consistent clusters of mental schemata (e.g., victim-schema, cause-schema). Each individual builds these schemata drawing on socialisation in a certain culture, media input, but also cognitions, values, feelings, life experiences or reasoning (Graber 1988). News frames in texts, "(...) in contrast, are the product of professional collaboration and represent a mixture of different social and cultural frames, actor frames, editorial frames and journalist frames" (Engesser and Brüggemann 2016, 828). Thus, even if the input of journalist frames and news frames may be similar, both types of frames can never be identical: the former have a more individual, the latter a more collective character.

Cycles of Nature Frame	Human acting threatens the natural system. Human, continually interacting with nature, is a secondary victim. Hence, humans need to change the ways in which they (inter)act with other beings/processes.
➤ Scala Naturae Subframe	Human-induced climate change threatens the natural system, especially the vulnerable parts. These changes also affect humans. While we collectively disregard the services of nature, some (elites) are more guilty than others. As nature lacks internal resilience or coping abilities, (elite) human intervention is imperative.
➤ Natural Web Subframe	The anthropocentric worldview harms the resilience of the natural web in multiple, interconnected ways. Human stewards who can/want to speak up for ‘the natural web’ are silenced in mainstream debates. Only by recognising the crucial role of these bottom-up groups, we may evolve towards a harmonious, just and mutually dependent coexistence.
Environmental Justice Frame	Particular – socio-economic, cultural, ethnic, gender – groups pay the bill of climate change as they are more sensitive to changes and/or lack coping abilities. The dominant groups carry the major responsibility for the problems due to their misguided priorities. Mitigation and/or adaptation will help to solve the problems.
➤ Unequal Vulnerability Subframe	Some groups are characterized by internal (structural) weaknesses (underdevelopment). They are disproportionately vulnerable to climate change consequences. Climate change constitutes a major external threat. Yet, elite groups bear the underlying responsibility: They do not sufficiently recognise the lives, economies, cultural identities or right to develop of others. To save and improve the latter, they must rectify their wrongs.
➤ Unequal Attribution Subframe	By enforcing ‘development’ upon others, western(ised) elites have built up multi-levelled debts: They threaten the resilience of the ‘victims’, rendering them disproportionately vulnerable to (climate) crises. If recognised by other groups as equal(y developed), these people can help themselves and encourage the rest of the world to work (together) on a (funda)mental transformation.
Human Rights Frame	The rights, freedoms, well-being and ways of living of humans are at stake. Climate change constitutes a major threat. However, (elite) people – blinded by short-term, ego-centric interests – also endanger their own kind. All humans have the obligation to take responsibility for their collective long-term fate.
➤ Consumer Rights Subframe	Human well-being, health and safety are vulnerable to environmental changes. While man-made climate change is an immensely powerful threat, certain actors also bear major responsibility as they do not use their knowledge/means for the common purpose. Therefore, politics, public services and science need to take up their responsibility, providing solutions and encouraging individual consumers to change.
➤ Civil Rights Subframe	The hegemonic system victimizes all citizens, turning us into passive consumers unable (nor allowed) to be critical. This makes us disproportionately vulnerable to (climate) crises. Hence, we need to reclaim our collective citizenship. Drawing on biocentric alternatives, we may work together towards more meaningful and better lives for all.
Economic Challenge Frame	The (economic) wealth of humans is under threat due to climate change <i>and</i> the inappropriate responses of (mostly) elite groups. Any solution at least needs to guarantee the status-quo situation, but ideally amplifies human prosperity and ‘optimizes’ economic relations.
➤ Rights of the Free Market Subframe	As nature is forgiving, there are no limits to human development. Due to environmental policies and/or unfair competition, however, some stakeholders are hampered in their struggle for natural wealth. They face revenue loss, inefficiency or weak political/economic positions. These pressures need to be lifted to allow those players to prosper, drawing on technological development/ingenuity.
➤ Human Wealth Subframe	Human-induced climate change has destructive economic, technological and/or cultural consequences. Those (political/economic elites) who are well-aware of the risks and able to react, are too preoccupied with short-term gain to act for the sake of long-term benefits. Those groups need to act and facilitate the acting of others. These investments are likely to stir development and prosperity.
Inscrutable are the Ways of Nature Frame	Climate change is a natural variance: all changes are due to actors within the natural system. If needed, the natural system will also mitigate the flaws. Human help is not required.
➤ Natural Machine Subframe	The changes in humans’ (natural) environment are mainly due to GHG emissions caused by particular natural mechanisms/species. The natural machine can regulate these changes: (other) species or processes are designed so that they can adapt to their (new) environments.
➤ Gaia Subframe	Changes in the GHG balance, due to system-internal developments, exert pressures on Gaia’s balanced state. Humans – interconnected with all other organisms – might also affect the system, in various areas. The latter are, however, negligible: if necessary Gaia will jump to a new stable state.

Table 1: Overview, and brief definitions, of the climate change frames and (anthropocentric/biocentric) subframes previously identified by the authors (Moernaut, Mast and Pauwels forthcoming).

2.1 Framing Climate Change

Previous research (Moernaut, Mast and Pauwels in press), based on the qualitative framing analysis of 1256 articles, yielded a number of climate change news frames (see table 1): the Cycles of Nature Frame, the Human Rights Frame, the Environmental Justice Frame, the Economic Challenge Frame and the rather sceptical Inscrutable are the Ways of Nature Frame.

Informed by the literature on environmental discourses (e.g., Dryzek 1997), we identified ideologically coloured subframes for each of these frames. *Scala Naturae*, Consumer Rights, Unequal Vulnerability, Human Wealth, Rights of the Free Market and Nature is a Machine are Anthropocentric Subframes. They share anthropocentric values like (economic) growth, competition, individualism, hierarchy, utilitarianism and (human) ingenuity. Their shared underlying argumentation is this: Humans are the main victims of the current changes, as their environment and/or natural services are threatened due to – largely – external pressures. Natural Web, Civil Rights, Unequal Attribution and Gaia are Biocentric Subframes. Biocentric views denounce the capitalist system, including the ways in which humans interact with nature and other social groups, as the roots of various socio-environmental problems, including climate change. The biocentric view provides alternatives based on ideas like harmony, diversity, mutual interconnectedness, cooperation, equality and moderation.

The Anthropocentric Subframes are criticised for only manipulating consumers into supporting short-term actions in the interest of the elites. They depoliticise the climate debate. Contrariwise, the Biocentric Subframes are said to be representing and stimulating profound transformations, by engaging bottom-up groups. They repoliticise the debate. Hence, they are considered as crucial preconditions for effective climate action (Pepermans and Maesele 2014).

2.2 Frame-building as a Multi-Level Process

The journalist is the central link in the news production chain (Boesman et al. 2017; Vossen et al. 2017). Dunwoody (1992) and Scheufele (2006) argue, for instance, that (the presence or absence of particular) journalist frames and newsroom frames affect(s) the choice for particular news frames. Engesser and Brüggemann (2016, 827) call the journalist frames of climate reporters “(...) one of the presumably most important influences on the media coverage and public understanding of climate change”. As climate journalists are often quite autonomous experts, their cognitive frames are more likely to permeate their reporting.

RQ1: What are the journalist frames of climate change reporters working in three mainstream and two alternative media outlets in Flanders?

RQ2: In which ways do the identified journalist frames help to predict the news frames in these outlets, and vice versa?

Journalist frames are not idiosyncratic, nor have individual journalists full control over the news frames which structure their articles (Scheufele 2006). Put differently, framing in the newsroom is a complex process (Boesman et al. 2017; Nurmis 2017; Vossen et al. 2017), affected by various factors. We will focus on the routines, organisational and extra-media levels of influences (Gans 1979; Shoemaker and Reese 2014):

Routines level. News values (Harcup and O’Neill 2001) often pave the way for particular news frames (Boesman et al. 2017; Vossen et al. 2017). For instance, drama may contribute to the production of visual frames which lack a positive solutions focus (Nurmis 2017).

Organisational level. Socialisation in the newsroom may give rise to newsroom frames (Scheufele 2006). The frames of the most influential gatekeepers, like chiefs or experts, are more

likely to be reproduced (Entman et al. 2009; Gans 1979; Shoemaker and Reese 2014). Beat journalists, who focus on particular institutions, sources or topics (e.g., politics), for instance, are often experts and thus quite autonomous gatekeepers (Brüggemann and Engesser 2014; Gans 1979). Accordingly, McCluskey (2008) contends that journalists are likely to produce different frames depending on their beats. For instance, ‘politicised reporters’ often support the ‘sustainability climate change frame’, which calls for societal reforms. Science beat reporters, however, tend to stick to ‘neutral scientific facts’ (Engesser and Brüggemann 2016).

Extra-Media level. “Journalists frame issues, but their interpretations are shaped, in part, by discourses external to news organisations” (Carragee and Roefs 2004, 219). Accordingly, many frame-building studies are concerned with the contributions of frame-sponsors to media frames (Vossen et al. 2017). For instance, elites – like politicians – often prevail in frame struggles (Gamson and Modigliani 1989; Hänggli 2012). Several studies found a connection between the use of certain sources and the prevalence of particular news frames (Boesman et al. 2017). Brüggemann (2014) makes the various types of journalist-source interactions more concrete: He distinguishes among frame-sending (‘neutral’ presentation of various frames), frame-setting (only frames consonant with the journalist frames are represented) and interpretive account (various frames are represented, but external frames are delegitimated) (Boesman et al. 2017; Scheufele 2006; Vossen et al. 2017).

This can be linked to objectivity. Objectivity is a ‘strategic ritual’ (Tuchman, 1972) and a ‘marketing strategy’ (Gans 1979; Kovach & Rosenstiel, 2007; Lewis et al. 2008; Shoemaker and Reese 2014). Journalists try to appear neutral, often through quoting and/or balancing of sources (frame-sending). When covering climate change, however, they often abandon this traditional approach: More critical types of balance (interpretive account) are used or balance is rejected (frame-setting). Some journalists explicitly advocate for the climate (frame-setting) or open up the debate to a variety of voices (frame-sending/interpretive account). The latter two strategies are often combined with transparency about biases or journalistic methods (Deuze 2005; Hanitzsch 2007; Hiles and Hinnant 2014). Kovach and Rosenstiel (2007) call this ‘objectivity as a means’: no one can communicate objectively, but transparency may prevent biases from undermining accuracy. The authors also distinguish between objectivity as ‘correspondence’ (having the facts right; fact-checking) and as ‘coherence’ (interpreting the facts, as interactive process). According to Brüggemann and Engesser (2014), reporters usually consult like-minded climate change reporters and sources in their ‘interpretive communities’ who provide information consonant with the journalists’ views (frame-setting).

RQ3: What are the influences on the routines, organisational and extra-media levels which affect frame-building in the context of five Flemish media outlets? Which factors help to explain the presence (or dominance) of certain climate change journalist and news frames? How do influences and frames interact?

The opposition between mainstream and alternative media is not clear-cut and increasingly blurring. Besides, just like ‘mainstream media’ ‘alternative media’ encompasses a spectrum of differing outlets. (Extreme) rightist alternative outlets have, for instance, different goals or strategies than progressive outlets (Downing 2001). This article focuses on two progressive alternative outlets. Accordingly, our definition particularly applies to this part of the alternative spectrum. For clarity’s sake it does take the counter-hegemonic features of alternative media as a starting point: Alternative media tend to be less institutionalised or driven by commercial interests than mainstream media. This allows them to be radical and engaged in terms of their content and production process. While they deconstruct journalistic, social, political, economic and/or cultural practices and construct alternatives, they tend to enact this change in a non-hierarchical and (partly) de-professionalised organisation. Their aim is to constitute an alternative public sphere,

which may encourage citizens to speak up and act for change (Atton 2002; Downing 2001; Harcup 2014).

Comparing mainstream and alternative media may help us to understand the link among media production and the Biocentric news Subframes in (progressive) alternative media. Besides, it also allows us to test the applicability of previous findings beyond the context of mainstream media.

RQ4: Which are the main differences in the production process of mainstream and (progressive) alternative media which help to explain their differential framings?

3 Research Design

Based on maximum variation sampling, we selected three northern Belgian mainstream newspapers (*De Standaard* (DS) (broadsheet, centrist), *De Morgen* (DM) (broadsheet, leftist background) and *Het Laatste Nieuws* (HLN) (popular, historical liberal roots)) and two alternative online outlets (*DeWereldMorgen* (DWM) and *MO** (pluralist/leftist)). The latter openly identify themselves as critical and engaged, closely cooperate with social/environmental movements and give a voice various bottom-up groups as sources or citizen-journalists (dewereldmorgen.be; mo.be). Based on purposive sampling, we selected the period 24 October to 4 December 2016 which encompassed a number of (attention-grabbing) climate events: the commencement of the Paris Agreement, the COP22 in Marrakech, the election of (climate-disbeliever) Donald Trump in the US (Ritchie and Lewis 2003). Employing the search tools of the Belgian press archive Gopress and/or the archives of outlets, we conducted key word searches. This yielded a corpus of 114 climate change articles.

We used a multimethod model to study frame-building from a journalistic perspective and link it to the resulting news texts/frames (Vossen et al. 2017). Firstly, we focused on the analysis of news frames in the articles. Based on previously constructed frame matrices (Moernaut, Mast and Pauwels in press), we conducted a deductive framing analysis (Van Gorp 2006) (see below).

The interview phase (Kvale and Brinkmann 2009; Ritchie and Lewis 2003) was inspired by grounded theory (Glaser and Strauss 1968). We used theoretical sampling. Phases of selection, interview analysis and the testing of preliminary findings were repeated until ‘data saturation’ was reached. We ended up with a corpus of 26 ‘climate reporters’, including four science, one political, one economic and one foreign affairs journalist, four (editors in) chief(s), five (chief) photo editors, five generalist reporters, two citizen journalists and three opinion-makers. Yet, this sampling was partly restricted by the reporters’ accessibility. Two mainstream outlets did only allow us to talk with their chief photo editors rather than to the photo editors who make most daily decisions. Also, some reporters were included who did not produce an article during the selected period, but have been regular contributors in the past and have comparable profiles to inaccessible reporters. Further, time restrictions and/or the inability/unwillingness of participants to go into their ‘personal views’, prevented us from identifying the journalist frames of all participants. However, the group of interviewees for whom we could define journalist frames is sufficiently large (n=18) to allow for reliable analysis.

We used semi-structured interviews, asking the participants to imagine how they would cover climate change if they could decide independently (Engesser and Brüggemann 2016). As such, we tried to reconstruct their journalist frames. Their own reconstructions of the history of their news stories allowed us to relate frame-building practices directly to the resulting news frames. Therefore, we tried to organise the interviews as briefly as possible after the publication of the articles, during November and December 2016 (Boesman et al. 2017). Apart from four

telephone/Skype interviews, all interviews were conducted at the respondents' work places. They took, on average, 45 to 60 minutes. The first author transcribed the interviews verbatim.

The interview analysis followed the phases of open coding, axial coding and selective coding (Glaser and Strauss 1968), facilitated by the software package NVivo. We continually compared, questioned and revised our data, preliminary concepts and codes, looking for negative or qualifying evidence. The journalist frames were identified by means of a deductive framing analysis. Based on ___ (2017), we identified the most characteristic reasoning and framing devices per subframe as variables (Van Gorp, 2006). For example, 'The West bears a large responsibility as major emitter of greenhouse gasses, refusing to change habits' (Unequal Vulnerability). If we identified several (salient) devices of a subframe in a respondent's discourse, we considered this as one of his/her journalist frames.

In line with the goals of qualitative research, we intended to describe in detail the worldviews, experiences and working conditions of a particular group of reporters, working in particular contexts, rather than to make generalisable claims. However, the identified patterns and concepts may hopefully also generate broader insights or encourage other studies.

4 Findings

4.1 Journalist Frames and News Frames

As table 2 demonstrates, the Anthropocentric Subframes prevail among the mainstream reporters. Scala Naturae and Unequal Vulnerability, in particular, are widely shared as journalist subframes. This image is largely reflected in the distribution of mainstream news frames. The journalist frames of the alternative reporters, however, reflect a far broader range of (anthropocentric and biocentric) views. Yet, the Anthropocentric Subframes were only found here among four reporters. The others approach climate change exclusively from a biocentric background. This diverse picture is more or less reflected in the alternative news production (i.e., news frames). However, the Anthropocentric Masterframe is here more prevalent than the Biocentric Masterframe. This is largely due to the fact that a considerable share of the articles in the alternative media are produced by the alternative press agency, of which both interviewed journalists hold Anthropocentric Subframes. We found that the journalist frames of individual reporters are often mirrored by the same/similar news frames in their articles. This suggests a strong influence of individual journalists (Brüggemann and Engesser 2014, 2016). However, it is probably more correct to state that journalist and news frames mutually reinforce each other. We will further nuance this, elaborating on factors which intervene in the frame-building process.

	<i>Scala Naturae</i>	<i>Consumer Rights</i>	<i>Human Wealth</i>	<i>Unequal Vulnerability</i>	<i>Natural Web</i>	<i>Citizen Rights</i>	<i>Unequal Attribution</i>	Total
Mainstream journalist frames	8	5	3	5	/	/	1	9 (journalists)
Mainstream news frames	38 69,1%	6 10,9%	8 14,5%	3 5,5%	/	/	/	55 (articles)
Alternative journalist frames	4	3	1	3	5	4	6	11 (journalists)
Alternative news frames	27 45,8%	4 6,8%	5 8,5%	10 16,9%	3 5,1%	5 8,5%	5 8,5%	59 (articles)

Table 2: Overview of the journalist frames and news frames in the mainstream and alternative outlets.

4.2 Working Mechanically or Organically

Two schematic visualisations summarise our findings (figures 1 and 2), highlighting the ideological-cultural differences between the two types of studied newsrooms (Shoemaker and Reese 2014). While the schemata fail to grasp the full complexity of journalism practice, as any schema would, they start to make this reality graspable and susceptible for critical discussions.

The mainstream newsroom is often described as ‘factory’ or ‘machine’ (e.g., Gans 1979). Similarly, a mainstream reporter claims: “I’m one little gear, a sprocket-wheel, in that machinery”. ‘The machine’ emerges from the newsroom (practices) described by the participants. Development, gain, efficiency, competition, individualism, hierarchy or control keep the system running. These are values of the anthropocentric worldview, with the ‘machine’ as central metaphor (Dryzek 1997). Yet, some habits are aimed at contributing to the larger (society and environmental) system: the media-workers want to raise awareness about and engage audiences for climate change (actions). The underlying ‘biocentric’ values – quality, collective decision-making regarding a climate action plan (Hiles and Hinant 2014) – are, however, embedded within the larger structures of the machine. They are secondary goals which are only pursued as long as they do not harm – or, preferably, facilitate – the goals to produce, grow and compete. Summarising, it is not hard to see how this system can almost not but reproduce the Anthropocentric (journalist/news) Masterframe, especially since it functions in a part of the world where this worldview is dominant (Dryzek 1997).

Obviously, the selected alternative newsrooms also function in a capitalist, competitive market. Hence, hegemonic (‘mechanical’) pressures control their workings to a certain extent (see ‘quantity’, ‘efficiency’, ‘hierarchy’, ‘control’). Nevertheless, the biocentric ‘organism’ or ‘natural web’ metaphor (Dryzek 1997) clearly emerges from our findings: Quality, diversity, harmony, cooperation, equality, inclusiveness, collectiveness, mutual interconnectedness, respect and modesty are recurring values. A journalist of an alternative news agency argues, for instance: “[t]his [the cooperation with colleagues] has grown in an organic and natural way”. Summarising, contributing to the (societal/environmental) system is the goal of these outlets, not growth for the sake of a minority. Similarly, the journalist and news frames are also diverse and inclusive.

Clearly, the opposition between mechanical and organic ways of working is not absolute, but is rather a continuum. Each outlet incorporates – to a lesser or larger extent – values and practices of the two ideal types (‘extremes’). The alternative press agency, for instance, takes a middle position: its horizontal newsroom (motto: ‘giving a voice to the voiceless’) depends on government subsidies, which come with expectations regarding content and economic viability. MO is closer to the centre than DWM. The popular mainstream outlet leans closer to the machine ideal than the broadsheets.

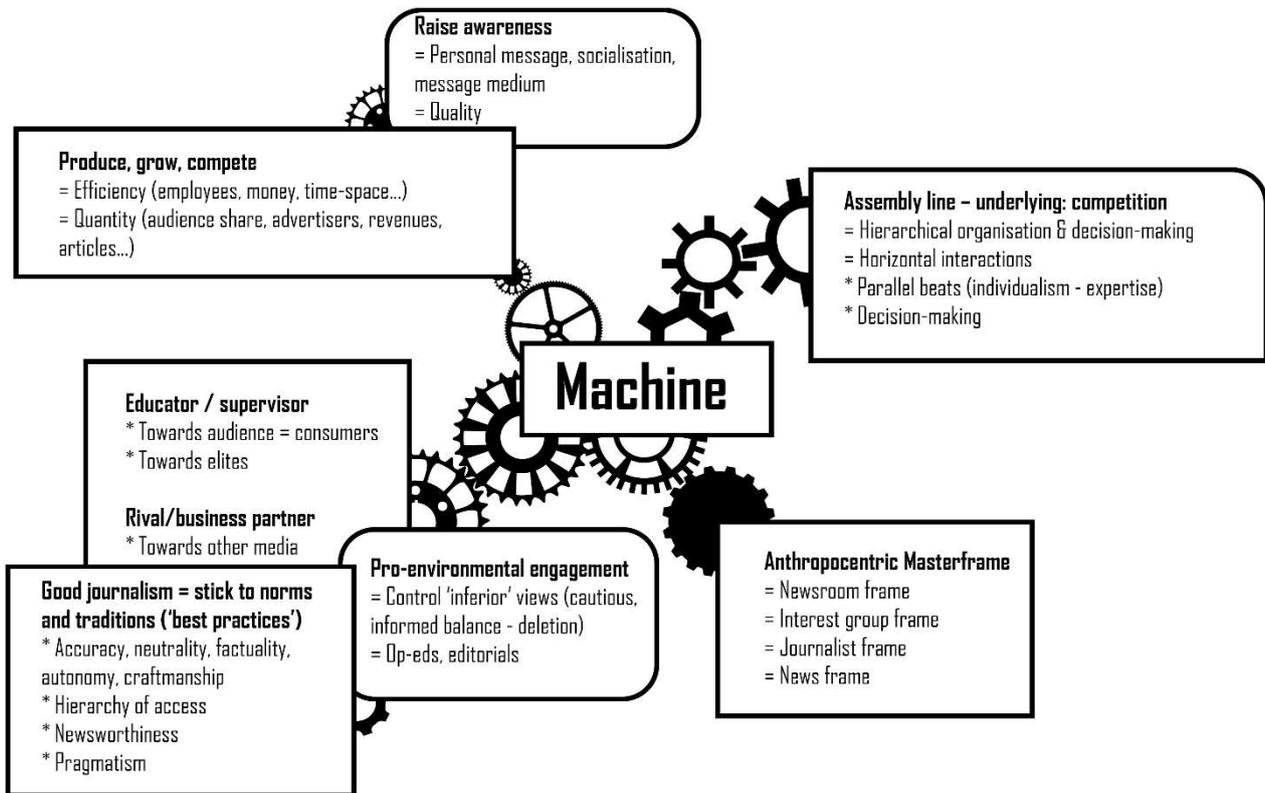


Figure 1: Schematic representation of the newsroom organisation of mainstream media, as a machine.

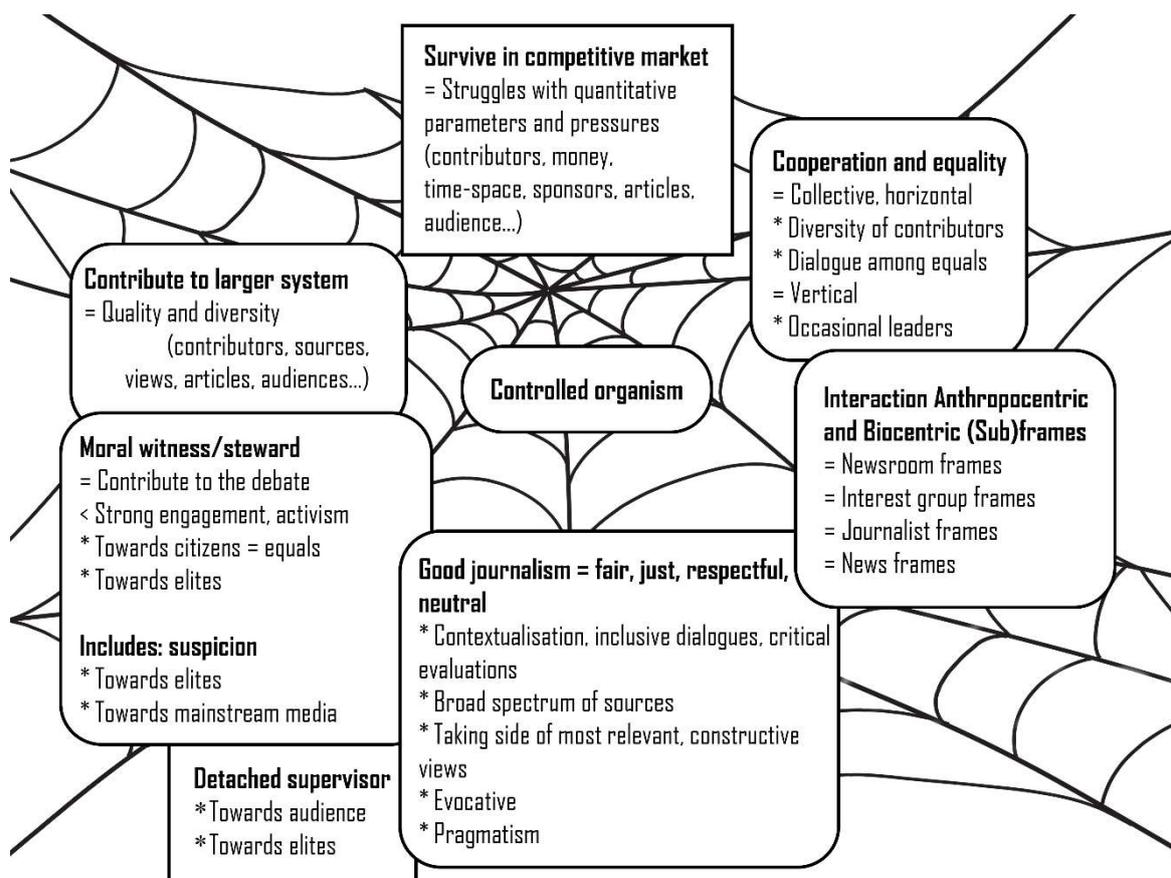


Figure 2: Schematic representation of the newsroom organisation of alternative media, as a (controlled) organism.

4.2.1 Newsroom Organisation

In the mainstream outlets, the (economic) interests of editor(s) in chief or management – individuals at the top of the newsroom hierarchy – strongly define the (salience of particular) climate change frames: “He [the editor in chief] sometimes steers [our decisions], especially when it comes to climate politics” (Mainstream foreign affairs journalist). “They literally say: that’s of no interest to us, so we’re going to do this less. I feel that, if I propose things (.), I get more often a no” (Mainstream science journalist). Most reporters argue that they have no problem to identify with these top-down views, suggesting that their journalist frames are consonant with the Anthropocentric newsroom Subframes (see table 2). However, their journalist frames may originally have been the result of socialisation, through feedback processes (Entman et al. 2009). It is, for instance, likely that reporters only set those (journalist) frames which are consonant with the newsroom frames (Brüggemann 2014; Gans 1979).

Within the hierarchical system, (beat) specialisation and seniority also equal autonomy to set frames (Brüggemann and Engesser 2014, 2016; Vossen et al. 2007). Many of the interviewed climate reporters are experienced beat reporters. A science journalist with more than 30 years of experience argues, for instance: “I choose what I’m going to write about. I propose this and it rarely gets [rejected]. I never get a no.” (Mainstream science journalist).

Depending on their beats, reporters tend to produce other news frames, which may or may not equal their journalist frames (McCluskey 2008). For example, a science reporter has multiple journalist subframes, but we only identified Scala Naturae in her news articles. The economic journalist has Scala Naturae and Human Rights as journalist subframes, while the Human Wealth Subframes in his news articles clearly reflect his beat. The beat system may, nevertheless, prevent reporters from seeing ‘the bigger picture’ of climate change, and thus, encourage decontextualisation (Berglez 2011). That is a typical characteristic of anthropocentric views.

Photo editors are also influential gatekeepers (Nurmis 2017). Drawing on their expertise and evaluations, they add visuals to verbal output. The interactions with the authors of the texts is limited: “They sometimes make suggestions, but as for the title, lay-out, photo, there’s no (...) or very little discussion” (Mainstream chief photo editor). If discussions take place, it is mostly among photo editors, editors and/or lay-outers. Usually, they are more concerned with practical considerations, like space limitations, than with content. This routine, pragmatic approach may lead to unconscious frame-sending (see below).

Generalist, early career reporters and external contributors like NGO representatives, at the bottom of the hierarchy, have less autonomy. They feel stronger pressures to follow-up instructions or sell proposals to superiors, and thus to set or even send the frames which are consonant with the views of the latter. For instance, a generalist reporter comments: “If good instructions are provided, the piece is already made for 50 percent.” Accordingly, an NGO staff member employs a news frame which does not appear in his journalist frame set. Another uses (anthropocentric) Unequal Vulnerability as news frame although he holds (biocentric) Unequal Attribution as (salient) journalist frame.

The alternative outlets work in more horizontal ways. The focus lies on equality, collective decision-making and diversity (Atton 2002; Downing 2001; Harcup 2014): “If we noticed that an article (...) was perhaps a bit controversial or if we saw that even within our own community of bloggers some people had other views, we always gave the opportunity to write a counter-opinion” (Citizen journalist). This context encourages all reporters to set frames (Brüggemann 2014). The strong overlap between journalist frames and news frames and the wide diversity of frames across the contributors suggests this. Socialisation effects (Entman et al., 2009) cannot be excluded, though. The activist argued, for instance, that she has more autonomy when writing for the alternative media: “A piece for *DeWereldMorgen* is going to be longer and a little drier. You’re just going to (...) make your story without really wanting to sell it”. However, there still is some hierarchy. The newsroom staff decides which external contributors can enter and which cannot. Also, they can make some views more salient than others, for instance by putting them on the website home page. However, poor quality or ethical considerations (e.g., racism), rather than content, are the main reasons to do so (Platon and Deuze 2003).

While some newsroom reporters have certain specialities – based on personal experiences or networks – there are no clear beats. All journalists write about various topics. Rather than an issue which is divided into small (individualised) subcategories, climate change is a shared responsibility or even a beat in itself (Eliasoph 1988). Many climate articles are provided by contributors outside of the newsrooms: freelancers, citizen journalists, opinion-makers, alternative news agencies. This is the result of newsroom policies, but also financial constraints (i.e., small newsrooms) (Atton 2002; Downing, 2001; Harcup 2014). The online character of the media also makes it easier to reach a broader group of contributors and to allow them access to the debate. In most cases, those are no beat reporters either. Anyhow, the lack of rigid compartmentalisations allows the alternative reporters to take a more comprehensive outlook on climate change (Berglez 2011). Contextualisation characterises the Biocentric Masterframe.

Many alternative reporters both write articles *and* select visuals. However, this does not foster stronger awareness regarding visual frame messages. Visuals are – similarly to the mainstream media – mainly selected based on superficial cues or pragmatic considerations. Most

reporters lack visual literacy or experience (Nurmis 2017). These practices may lead to (unconscious) visual frame-sending.

4.2.2 Objectivity and Frame-sponsors

External sources provide a large part of the input for news articles. Nevertheless, reporters can decide which views they accept, reject, adapt or (de)legitimate. The overlap among journalist frames and news frames in the mainstream outlets and alternative press agency, however, suggests that climate journalists often set frames (Brüggemann 2014): They quote sources which confirm their journalist frames and thus their pro-environmental views. If sources are balanced, they usually reflect the same or reconcilable (anthropocentric) (sub)frames (Hiles and Hinnant, 2014). Scientists and international (public) organisations, for instance, generally provide *Scala Naturae* and *Consumer Rights* Subframes. *Human Wealth* can be associated with economic researchers or organisations, as well as industry. Large NGOs (who can provide scientific numbers and facts) and international organisations (e.g., World Development Bank) are the main sources for *Unequal Vulnerability*. Politicians can be associated with various frames.

I believe (...) that all [heat] records have been broken (.) in the 21st century. I don't think that's a coincidence anymore. And if you can quote someone, then, who says: Yes, that is no coincidence anymore. Well, (...) you can write lots of things, but you must have it framed by someone (...). (Mainstream generalist journalist)

Quoting is, like balance, an important 'strategic ritual' (Tuchman 1972) which provides a veil of objectivity (see 2.2). Kovach and Rosenstiel (2007) argue, however, that this *objectivity as a goal* deceives the audience, obscuring the subjectivity of the frame-building process and the choice of journalists for elite sources within their interpretive communities (Brüggemann and Engesser 2014; Dunwoody 1980; Vossen et al. 2017).

Sceptics and 'overly ideological' social/ecological movements are at the bottom of the hierarchy. The former are rejected or backgrounded because the journalists do not agree with them on the level of 'scientific facts' (*correspondence*). That is, the interest group (sub)frames (e.g., Rights of the Free Market) are irreconcilable with their journalist frames. The subframes of the social/ecological movements take 'climate facts' as starting point, but interpret them differently, drawing other conclusions than the reporters (*coherence*) (Kovach and Rosenstiel 2007): their frames have a biocentric colour or focus on societal causes or consequences irrelevant to the reporters. Accordingly, most use an *interpretive approach* (Brüggemann 2014) when dealing with non-hegemonic frame-sponsors, at least if the latter provide well-argued views or turn out to be (come) influential actors: Various parties get a voice, but placement, word choice or rhetorics help to enhance the salience – and legitimacy – of the journalist frames. As such, inequality (hierarchy) among views is suggested (Hiles and Hinnant 2014): "I will always add: Look, this is not a half-half debate. This is the view of a minority" (Mainstream science journalist).

Unsurprisingly, the reporters argue that language must be 'accurate, scientific and neutral': "(...) our language is (.) fairly neutral (...). It's not as if we write in a subjective way about climate (.)" (Mainstream science journalist). Similarly, visuals are supposed to reflect the essence of the verbal story, showing what is described in the narrative ('an illustration') or providing objective proof of (scientific) findings (Nurmis 2017). Anyhow, the visual needs to support the truth claims of the verbal text.

Accordingly, climate pictures are mostly selected based on their denotative content (who, what, where, when, how) rather than on their potential connotations or associations, even though

some photo editors are – theoretically – aware of these (Nurmis 2017). Hence, photo editors often seem to *unconsciously send frames*, rather than to deliberately set them. That is problematic as many images (e.g., smoke stacks, satellite images) – mostly from international photo agencies rather than from local photo journalists – are generic and decontextualised and tend to reinforce the anthropocentric worldview (Hansen and Machin 2008). Cost and time efficiency as well as the abstract/global character of climate change motivate these habits (Lewis et al. 2008; Nurmis 2017).

To alternative reporters, however, *objectivity is not a goal but a means*. Their goal is to convey particular views on, or engagement for, the climate (Deuze 2005; Hiles and Hinant 2014; Kovach and Rosenstiel 2007). These considerations are facilitated by their contexts and working conditions. An online, less commercial context creates less pressures in terms of time (e.g., to consult various sources) or space (e.g., to include various voices). Also, the periodicity (lack of 24-hours news cycle) allows for more freedom. Neither must ‘objective’ articles be sold to as broad an audience as possible (Atton 2002; Downing 2001; Harcup 2014; Platon and Deuze 2003). For instance:

We believe in the objectivity of facts, but not in the neutrality of news coverage. That is a myth. News coverage is always coloured. What we definitely denounce, is the myth propagated by the big media, of them being neutral. (...) I don’t claim that *De Standaard* or *De Morgen* are not entitled to their own views, but they need to be open about them (Alternative generalist journalist).

The alternative journalists also strive for *correspondence* when it comes to ‘the most relevant’ (scientific) facts. Yet, they are more transparent about their deliberate choices by denying climate sceptics all access to the debate. That is, they *openly set frames* (Brüggemann 2014): “I think that [letting both parties have their say] is out of question in the future. (...) Yes, it is here. Now is the time for looking at solutions” (Citizen journalist). Accordingly, most alternative journalists do not refrain from taking a clear side in the ongoing debates about solutions (*coherence*), either. Again, they set (‘the most constructive’) frames, based on their assessments of the available information. In the process, they do not refrain from questioning their original views, and denouncing them if needed (Kovach and Rosenstiel 2007).

As the latter suggests, this *frame-setting* is, in the end, *the result of (underlying) interpretive approaches*. These are often implicit or even invisible, based on ‘debates’ among various contributions or as antecedent of individual articles. These inclusive debates involve hegemonic – mainstream NGOs, scientists or politicians – and non-hegemonic contributors – bottom-up movements, activists, alternative thinkers – as equals (Atton 2002; Deuze 2005; Downing 2001; Harcup 2014; Hiles and Hinant 2014). They allow the audience to evaluate the appropriateness of certain sources and to take sides based on a well-informed choice. Yet, giving more salience to certain argumentations (e.g., through placement), the newsroom reporters do highlight particular frames (Platon and Deuze 2003): “So, I think that I always try to do two things. That is, on the one hand (.), showing that there is a debate. Well, laying bare the debate or conflict and saying: What is being presented here is just one view. There are also others. Secondly, I take a clear standpoint in that debate, of course” (Activist).

Accordingly, most alternative journalists deconstruct the myth of neutral, factual language: “Words can sometimes have a completely different meaning for one person than for another. Hence, I find it very important to convey, in one way or another, what I really mean” (Citizen journalist). Summarising, as language is always coloured, it is crucial to carefully choose the colour which best reflects your viewpoints. Clearly, then, (verbal) frame-setting and interpretive approaches are – to a certain extent – the result of a fairly conscious process (Vossen

et al. 2017). Probably, their oppositional role makes the alternative reporters more aware of the boundaries of (their) frames.

As for visual communication, however, critical awareness is limited, at least in daily practices constrained by (financial) limitations. As in the mainstream media, *visual frames* are often (unconsciously) *sent*. Nevertheless, they are sometimes constructed (i.e., *set*) more consciously. The reporters mention denotative content, metaphorical or metonymical associations and contrasts as meaning layers they pay attention to (Nurmis 2017): “If some people act violently or (.) commit vandalism during a demonstration (...), I wouldn’t focus on that image but rather on the people carrying a message” (Alternative generalist journalist).

Most photographs are provided by NGO (or citizen) photographers (in the South) and/or are creative commons. Again, newsroom policies *and* practical restraints inspire these choices. Those sources may provide different perspectives (frames), drawing on different life experiences or worldviews (Graber 1988; Scheufele 2006). Besides, they may have access to events or locations which are restricted to professional (western) journalists (Gess 2010).

4.2.3 News Values

The commercial revenue model and hierarchical organisation of mainstream outlets and the alternative press agency urge reporters to sell news stories to superiors or audience. News values are routines helping them to better predict their success and, accordingly, to efficiently select and structure information (Gans 1989; Harcup and O’Neill 2001; Shoemaker and Reese 2014). The major news values mentioned by the interviewees are relevance (for the audience), power elites, bad news, unambiguity, surprise, frequency (see event-centeredness), composition and journalist or outlet agenda (Nurmis 2017).

These news values have an impact on frame-building (Boesman et al. 2017; Vossen et al. 2017). For instance, three reporters highlight the economic consequences of climate change (Human Wealth) as this is a new (surprise, composition) and thus interesting angle. That is, ‘the news is in the frame’ (Boesman et al. 2017).

I think it’s a conscious decision because it’s really something which is new. (...).
It is not well known or it has not often been written before (...) that we are (.)
evolving towards an economy which can completely decouple from it [the
climate]. (Mainstream science reporter)

The journalists consider articles employing this frame as positive, and thus, potentially engaging (positive news). It is indeed generally accepted in society, and commercially oriented media companies, that economic growth is desirable, and thus, positive (Dryzek 1997) (consonance, relevance).

Negative news (drama) is also an important news value. Various types of threats are highlighted, which seem to facilitate different frames. For instance, a mainstream generalist reporter who exclusively uses *Scala Naturae* as journalist/news frame, stresses the need to show the effects on nature which is of direct interest to us: “If the giraffe appears on the red list, that seems interesting to us. It’s an animal which appeals to the imagination”. The economic journalist is preoccupied with economic problems and usually produces Human Wealth Subframes (beat frame). We found similar interactions among the news value ‘human drama’ and Consumer Rights.

Accordingly, we contend that news values cannot explain the presence of particular (sub)frames. They pave the way for particular (sub)frames, but only to those frames which are mentally available to journalists. Conversely, what is newsworthy largely depends on one’s cognitive frames (Graber 1988). Hall (1973) argues, accordingly, that the character of ‘surprise’

or ‘power elites’ strongly differs depending on one’s worldviews, reconfirming the latter (Eliasoph 1988).

The interviewed alternative journalists who produce Biocentric Subframes are generally more concerned with sharing messages than with newsworthiness (selling articles). It is often part of alternative outlets’ policies to critically renegotiate and/or reject news values (Deuze 2005b; Eliasoph 1988). The non-commercial character (a revenue model based on subsidies/donations) and more horizontal organisation of the selected alternative outlets also lifts the need for reporters to sell their stories to audiences or other gatekeepers and to work in efficient, routine ways. Also, the unlimited character of the online context and periodicity (less deadline stress) allow for more freedom (Atton 2002; Downing 2001; Gess 2012; Harcup 2014; Platon and Deuze 2003). However, to make sure their messages are heard, the reporters do try to make them evocative. This makes newsworthiness a means, not a goal as such. It is a (secondary) ‘accentuation strategy’: “Yes, I do try to make it more interesting, but (sighs) I don’t hunt for click baits. (...) I’ll write in a challenging way for people who read [an article], not for people to read it” (Citizen journalist).

The mentioned news values – relevance, unambiguity, composition, surprise and frequency – seem similar to those highlighted by the mainstream journalists. Yet, they are operationalised differently. After all, these reporters usually have other journalist frames (see above) (Eliasoph 1988; Graber 1988; Hall 1973).

Relevance is often connected to the constructive messages people really need (see positive news): “We must make a story of hope and renewal. That’s what Rob Hopkins has made clear: Alright, it is bad, but we can all act together (...)” (Alternative generalist journalist).

Composition and surprise must keep the topic ‘fresh’ and engaging. Yet, diversity does no longer exclusively enclose the views the audience wants/expects, but also little exposed insights which the alternative reporters deem important: “Well, should the title, resistance against climate summit is needed now more than (.) ever, would have been combined with (.) another image, of a Syrian terrorist (.), you would think: Well, have you ever, that might be interesting” (Activist). Contrary to the mainstream reporters, the alternative journalists do not connect ‘relevance’ and ‘good news’ to Human Wealth, but rather to a subframe like Citizen Rights which highlights the ‘good life’ awaiting us if we take action.

Underlying these (‘alternative’) news values, we argue, there is an overarching goal: providing contextualisation and alternative, more constructive views (Atton 2002; Downing 2001; Harcup 2014). Hence, we consider ‘contextualisation’ as an overarching news value in alternative media.

5 Conclusions

Our findings largely confirm, and extend, the results of other studies, but nuance the conclusions of Vossen et al. (2017), who found that journalist frames have only limited predictive value for the usage of news frames. They argued, however, that sources and news values are important influences. Based on our qualitative case study, we contend that journalist frames can have an important impact in frame-building processes (Scheufele 2006). We found that the mainstream and alternative reporters employ similar methods: If they do not set frames, they often use interpretive approaches. Both groups refer to similar news values. Nevertheless, their news frames often differ. The journalist frames can largely explain these differences. Thus, even if journalist frames may have no direct impact on the media frames, they apparently affect the outcome of other influences. The differences among the studied news topics – global poverty versus climate change – may explain the differing findings. Acting more often as (autonomous) specialists, climate journalists are more likely to affect the frame-building process (Brüggemann and Engesser 2014, 2016). Also, we found that climate change is the subject of lively newsroom

debates. Poverty, however, is a more diffuse and vague topic (Vossen et al. 2017). Hence, future frame-building studies should attend to other types of issues to test the transferability of patterns identified in the context of climate change reporting (including this study).

The mainstream newsrooms produce exclusively Anthropocentric journalist and news Subframes and accordingly monocultural newsroom (sub)frames. The mainstream reporters in our study use various strategies to survive within this machine. They tend to reproduce (set/send) frames which, they feel, are consonant with – a rather narrow set of – newsroom frames (i.e., strongly defined by superiors) and/or beats. Besides, their journalist frames are likely to be the result of newsroom socialisation in the first place. Mainstream news values (as goals) and journalist frames are mutually constitutive and tend to reinforce the dominant (anthropocentric) perspectives. Lacking mental access to alternative frames and feeling the pressure to appear neutral ('objectivity as a goal'), the journalists approach their (socialised) cognitive frames as factual, balancing counter-views against them. The alternative newsrooms are characterised by a diversity of newsroom frames, and thus journalist and news frames. In the 'controlled organism' news strategies are means rather than goals. In the absence of one, hierarchically defined newsroom (master)frame (or beat frames), each journalist feels free to stick to his/her journalist frames, even if these are not consonant with those of their co-workers. They draw more often on personal experiences in NGOs or grassroots projects, values and reasoning, rather than socialisation. This may (partly) explain the largely biocentric colour of their (sub)frames. Having access to a broader range of frames (e.g., by allowing various views to access the debate), they do not refrain from questioning their own perspectives: The results of these interactions are foregrounded as most constructive facts. News values and journalist frames mutually reinforce each other. Yet, newsworthiness as a means allows more freedom to include other perspectives (Deuze 2005; Dunwoody, 1980; Eliasoph 1988; Gans, 1979; Gess 2012; Hanitzsch 2007; Kovach and Rosenstiel 2007; Scheufele, 2006).

Like the alternative media have adopted and renegotiated strategies used by (mainstream) media (in general), mainstream media might fruitfully adopt insights from their alternative counterparts: Providing broader contexts, allowing more diverse groups of sources to access the debate, being more open about convictions and methods (i.e., frame-setting) (Gess 2012; Kovach and Rosenstiel 2007). This may pave the way for more inclusive and open newsrooms which could provide broader sets of frames. As such, they may help to repoliticise the climate debate, a crucial precondition for more effective actions on *the* global threat of this century (Pepermans and Maesele 2014).

We hope that the discussed concepts and patterns will be further tested, employed and/or developed by other researchers, in other contexts. This study has some shortcomings which require further research. The last stage of the frame-building process, audience interpretations, must be included into analyses to fully understand the implications of framing. Follow-up studies also need to delve deeper into visual frame-building. Lacking data regarding the journalist frames of the photo editors, we could only draw more general conclusions. Such limitations could be tackled by adding an ethnographic layer in future studies.

REFERENCES

- Atton, Chris. 2002. *Alternative Media*. London: Sage.
- Berglez, Peter. 2011. "Inside, outside, and beyond media logic: journalistic creativity in climate reporting." *Media, Culture & Society* 33: 449-465.
- Boesman, Jan, Anna Berbers, Leen D'Haenens, and Baldwin Van Gorp. 2017. "The news is in the frame: A journalist-centered approach to the frame-building process of the Belgian Syria fighters." *Journalism* 18: 289-316.
- Brüggemann, Michael. 2014. "Between Frame Setting and Frame Sending: How Journalists Contribute to News Frames." *Communication Theory* 24: 61-82.
- Brüggemann, Michael, and Sven Engesser. 2014. "Between Consensus and Denial: Climate Journalists as Interpretive Community." *Science Communication* 36: 399-427.
- Brüggemann, Michael, and Sven Engesser. 2016. "How Journalists' Mindsets Influence Their News Stories: Evidence from a Multilevel Analysis of Climate Communication." Paper presented at the annual meeting of the International Communication Association, Fukuoka, June 9-13.
- Carragee, Kevin M., and Wim Roefs. 2004. "The Neglect of Power in Recent Framing Research." *Journal of Communication* 54: 214-233.
- Dan, Viorela. 2017. "Frame-Building in Health Communication. Differences in News Framing among the News/Photo Sources Used and between News Frames and Advocacy Frames." Paper presented at the annual meeting of the International Communication Association, San Diego, CA, May 25-29.
- Deuze, Mark. 2005. "What is journalism? Professional identity and ideology of journalists reconsidered." *Journalism* 6: 442-464.
- Downing, John D.H. 2001. *Radical Media. Rebellious Communication and Social Movements*. Thousand Oaks, CA: Sage.
- Dryzek, John S. 1997. *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford U
- Dunwoody, Sharon. 1992. "The media and public perceptions of risk: How journalists frame risk stories." In *The social response to environmental risk: Policy formulation in an age of uncertainty*, edited by Daniel Bromley, and Kathleen Segerson, 75-100. Boston, MA: Kluwer.
- Eliasoph, Nina. 1988. "Routines and the Making of Oppositional News." *Critical Studies in Mass Communication* 5: 313-334.
- Engesser, Sven, and Michael Brüggemann. 2016. "Mapping the minds of the mediators: The cognitive frames of climate journalists from five countries." *Public Understanding of Science* 25: 825-841.
- Entman, Robert M. 2004. *Projections of Power: Framing News, Public Opinion, and U.S. Foreign Policy*. Chicago and London: The University of Chicago Press.
- Entman, Robert M., Jörg Matthes, and Lynn Pellicano. 2009. "Framing politics in the news: Nature, sources and effects." In *Handbook of Journalism Studies*, edited by Karin Wahl-Jorgensen, and Thomas Hanitzsch, 175-190. London: Routledge.
- Gamson, William A., and Andre Modigliani. 1989. "Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach." *American Journal of Sociology* 95(1): 1-37.
- Gans, Herbert J. 1979. *Deciding what's news: a study of CBS evening news, NBC nightly news, Newsweek and Time*. New York, NY: Pantheon books.
- Glaser, Barney, and Anselm Strauss. 1968. *The discovery of grounded theory: Strategies for qualitative research*. London: Weidenfeld and Nicolson.
- Gess, Harold. 2012. "Climate change and the possibility of 'slow journalism'." *Ecquid Novi: African Journalism Studies* 33(1): 54-65.
- Graber, Doris A. 1988. *Processing the News: How People Tame the Information Tide*. 2nd ed. New York, NY: Longman.

- Hall, Stuart. 1973. "The determination of news photographs." In *The manufacture of news. Social problems, deviance and the mass media*, edited by Stanley Cohen, and Jock Young, 176-190. London: Constable.
- Hanitzsch, Thomas. 2007. "Deconstructing Journalism Culture: Toward a Universal Theory." *Communication Theory* 17: 367-385.
- Hansen, Anders, and David Machin. 2008. "Visually branding the environment: climate change as a marketing opportunity." *Discourse Studies* 10: 777-794.
- Harcup, Tony. 2014. "'News with a Kick': A Model of Oppositional Reporting." *Communication, Culture and Critique* 7: 559-577.
- Harcup, Tony, and Deirde O'Neill. 2001. "What Is News? Galtung and Ruge revisited." *Journalism Studies* 2: 261-280.
- Hänggli, Regula. 2012. "Key Factors in Frame-building: How Strategic Political Actors Shape News Media Coverage." *American Behavioral Scientist* 56: 300-317.
- Hiles, Sara, and Amanda Hinnant. 2014. "Climate Change in the Newsroom: Journalists' Evolving Standards of Objectivity When Covering Global Warming." *Science Communication* 36: 428-453.
- Kovach, Bill, and Tom Rosenstiel. 2007. *The Elements of Journalism. What Newspeople Should Know and the Public Should Expect*. 2nd ed. New York, NY: Three Rivers Press.
- Kvale, Steinar, and Svend Brinkmann. 2009. *Interviews. Learning the Craft of the Qualitative Research Interviewing*. 2nd ed. Los Angeles, CA: Sage.
- Legard, Robin, Jill Keegan, and Kit Ward. 2003. "In-depth Interviews." In *Qualitative Research Practice. A Guide for Social Science Students and Researchers*, edited by Jane Ritchie, and Jane Lewis, 139-169. London: Sage.
- Lewis, Justin, Andrew Williams, and Bob Franklin. 2008. "Four Rumours and an Explanation." *Journalism Practice* 2: 27-45.
- McCluskey, Michael. 2008. "Reporter Beat and the Content Differences in Environmental Stories." *Journalism and Mass Communication Quarterly* 85: 83-98.
- Moernaut, Renée, Jelle Mast, and Luc Pauwels. in press. "Framing Climate Change: A Multi-level Model." In *Handbook of Climate Change Communication*, edited by Walter Leal Filho, Ulisses Azeiteiro, Evangelos Manolas, and Anabela Mariza Azul. Springer.
- Nurmis, Joanna. 2017. "Photo Editors: the gatekeepers of climate change visuals." Paper presented at the 14th biennial Conference on Communication and Environment, Leicester, June 29-July 2.
- Pepermans, Yves, and Pieter Maesele. 2014. "Democratic debate and mediated discourses on climate change: From consensus to de/politicization." *Environmental Communication* 8: 216-32.
- Platon, Sara, and Mark Deuze. 2003. "IndyMedia Journalism: A Radical Way of Making, Selecting and Sharing News?" *Journalism* 4: 336-355.
- Ritchie, Jane, and Jane Lewis, Eds. 2003. *Qualitative Research Practice. A Guide for Social Science Students and Researchers*. London: Sage.
- Scheufele, Bertram. 2006. "Frames, schemata and news reporting." *Communications* 31: 65-83.
- Shoemaker, Pamela, and Stephen D. Reese. 2014. *Mediating the Message in the 21st Century: A Media Sociology Perspective*. 3th ed. New York, NY: Routledge.
- Tuchman, Gaye. 1972. "Objectivity as Strategic Ritual: An Examination of Newsmen's Notions of Objectivity." *American Journal of Sociology* 77: 660-679.
- Van Gorp, Baldwin. 2006. *Framing asiel. Indringers en slachtoffers in de pers* [Framing asylum: Intruders and victims in the press]. Leuven: Acco.
- Vossen, Mirjam, Baldwin Van Gorp, and Lau Schulpen. 2017. "Thinking and Writing About Global Poverty." *Journalism Studies* (online).