

Reconciling climate change leadership with resource nationalism and regional vulnerabilities: a case-study of Kazakhstan

Dr Marianna Poberezhskaya, Nottingham Trent University,
marianna.poberezhskaya@ntu.ac.uk (corresponding author)

Dr Nataliya Danilova, University of Aberdeen

Abstract

This contribution explores how climate change is presented in one of the most established Kazakhstani newspapers, *Kazakhstanskaya Pravda*. Using quantitative and qualitative frame analyses, we explore patterns of climate change communication through the focus on framing of climate science, consequences, and responsibilities. We argue that resource nationalism shapes climate discussion in Kazakhstan with climate change emerging as a state-controlled ‘resource’. We also identify that the coverage of national and international responsibilities is reflective of Kazakhstan’s geopolitical vulnerabilities arising from its ambiguous relationship with Russia as well as attempts at presenting itself as being at the front of global sustainable development.

Keywords: Kazakhstan, climate change, environmental communication, Central Asia, resource nationalism, frame-analysis

Introduction

Media coverage of climate change has been a popular subject of scientific exploration over the last two decades (e.g. Antilla 2005; Boykoff and Boykoff 2004; Doulton and Brown 2009; Lockwood 2009; Olausson 2009; Kim 2011; Grundmann and Scott 2014; Davidsen and Graham 2014). Despite exponential growth within this field of study, one can observe a persistent over-representation of research findings based on trends established in developed Western democracies (Takahashi and Meisner 2013). Therefore, there is an evident need to explore how climate change is presented in developing authoritarian/semi-authoritarian

countries which either act as major greenhouse gas (GHG) emitters due to their drive towards the intensified model of economic development, and/or already suffer from the destructive power of climate change with little public discussion of its impacts on society. We seek to fill this gap in climate change communication studies through the detailed analysis of climate change-related coverage in Kazakhstan: Kazakhstan is an example of a resource-rich developing country with a carbon-intensive economy (Kerimray *et al.* 2016), and an authoritarian/semi-authoritarian system of governing (e.g. Laruelle 2016).

By applying a mixed method approach, we offer three conceptual contributions to climate change communication studies. Firstly, through the discussion of climate change scepticism we argue that political regime type does not automatically suggest a more or less sceptical attitude towards anthropogenic climate change; however, authoritarian governments do tend to shape climate change discussions in a manner that avoids social contestation of the issue. Secondly, we explore the connection between economy, nationalism and climate change coverage, which exposes an instrumental use of climate change as another ‘resource’ to strengthen the authoritarian state. Thirdly, we suggest that, as in authoritarian regimes state-controlled media rarely blame national governments for climatic change, we need to look at historical legacies and contemporary international relations to understand who is seen as responsible for this environmental problem.

Finally, this contribution fills a substantial gap in the academic literature and policy-orientated analysis of climate change communication in Central Asia (CA). This region covers developing and mostly authoritarian/semi-authoritarian countries, located in an area with rapidly worsening climate change risks. These countries have limited capacities to face climate change consequences due to their existing ‘adaptation deficit’ and substantial scale of predicted climate change impact on economic, political and social structures (Fay *et al.* 2010). Moreover, this region has been exposed to the Soviet-era short-sighted policies of environmental exploitation and development, and further may be faced with complicated relations with Russia (as the successor of the former colonial power) and other international actors.

We first look at the role of media in climate change discussion within various geopolitical contexts. We then present methodological considerations for the selected case study, followed by the empirical analysis, which is organised into two main sections, each covering the findings from quantitative and qualitative frame analyses. We conclude with a discussion of observed frames for climate change scholarship and future research.

Climate change and the media

The importance of the ‘social definition’ of environmental problems in general (Beck 1994) and media communication of climate change risks in particular has been long acknowledged (Bell 1994; Boykoff and Boykoff 2004). However, climate change remains a complex issue for media practitioners to cover (Gavin *et al.* 2011) due to its scientific nature and spatial and temporal characteristics (with climate change consequences being delayed or geographically dispersed). This is further complicated by various degrees of climate scepticism or denialism that question the existence of climate change, or its anthropogenic character and its destructive nature (Tesler 2017). Based on research mostly conducted in Western democracies, it has been suggested that media have moved past the misleading ‘balanced’¹ reporting (Grundmann and Scott 2014; Schmid-Petri *et al.* 2015). Contrary to this premise, the limited but expanding body of literature discussing coverage of climate change in authoritarian/semi-authoritarian countries posits that state-controlled media are still likely to demonstrate some evidence of scepticism mirroring official positions (Tynkkynen and Tynkkynen 2018).

Moreover, whilst it has been noted that even within democratic countries, mass media are impacted by political and socio-economic characteristics (Carvalho 2005), within authoritarian/semi-authoritarian and/or developing countries (such as Kazakhstan) this contextual dependency is substantially stronger (Gunay *et al.* 2018; Lepadatu 2017; Pandey and Kurian 2017). Furthermore, the existing scholarship demonstrates that economically developed states are more responsive to viewing and covering climate change risks as global environmental issues (Chetty *et al.* 2015), whereas the coverage of climate change in developing countries tends to prioritise their economic advances (Yun *et al.* 2014). To expand this debate, we see the theoretical approach of ‘resource nationalism’ as a productive tool of studying climate change communication in developing authoritarian/semi-authoritarian countries. Wilson (2015: 400) identifies resource nationalism as ‘a strategy where governments use economic nationalist policies to improve local returns from resource industries’ and “‘set the terms” for resource exploitation in ways that advance specific national goals’. The existing body of literature explores the manifestations of resource nationalism as solely focused on the state’s control over natural (mostly fossil fuel) resources. Studies of resource nationalism in Eurasia (see: Domjan and Stone 2010) have demonstrated that this policy can feed geopolitical ambitions, a point which is particularly relevant to the framing of responsibilities for climate change to national/international actors. Thus, we argue that resource nationalism can function as a powerful tool of reframing climate change.

Here we refer to Entman's (1993: 52) classic definition of framing as a process of selecting 'some aspects of a perceived reality and [making] them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation'. Furthermore, as highlighted by Dirikx and Gelders (2010: 732): 'frames implicitly or explicitly emphasize aspects of complex issues, such as climate change, thereby making it possible for the public to rapidly determine why an issue is important, who is responsible, and what might be the consequences'. Specifically, Pandey and Kurian (2017), and Dirikx and Gelders (2010) identify the 'conflict frame' (climate sceptics vs. proponents), 'consequences frame', and 'responsibility frame' as key framing devices. We clarify the application of this three-fold typology in the methodological section.

Lastly, climate change media coverage in Western democracies is often characterised by responsibility for climate degradation being predominantly allocated to national governments (e.g. Dirikx and Gelders 2010), whilst in developing and/or authoritarian states the governments' decisions or policies are rarely blamed (Poberezhskaya 2015; Pandey and Kurian 2017). Furthermore, Billett (2010: 13-14) highlights the importance of considering vulnerabilities arising from the historical and contemporary concerns over colonialism. This theme 'based on international postcolonial divides' feeds into a 'nationalistic argument of "us" versus "them"', with responsibility for climate change located outside of the national boundaries (*ibid*). Belfer *et al.* (2017: 66) argue that the lack of discussion of colonialism and ambivalent historical context 'silences the role of broader socio-political factors within which vulnerability to climate change is created and sustained'. The unique context of CA is defined by the complex relationship with Russia as a successor to the former colonial power, and a key geopolitical actor. At the same time, the collapse of the Soviet Union in 1991 propelled nationalising policies across the region. For example, Kazakhstan's independence opened the door to engagement with the Western community (Laruelle 2016; 2018). Therefore, we suggest that the impact of international politics over national climate press coverage should be explored (Gavin and Marshall 2011), and specifically the contradictions in the media depiction of ambivalent roles attributed to international actors.

Based on the identified arguments, we propose the following research questions:

- 1) To what extent do the media link climate change with human activity? This question explores the framing of climate science and climate scepticism.

- 2) What consequences of climate change are covered/prioritised by the media in Kazakhstan? Specifically, to what extent journalists link climate change topics with the economic/energy setting?
- 3) How does climate change-related coverage frame responsibilities/blame?

Methodology

We analyse climate change coverage by the state-owned newspaper *Kazakhstanskaya Pravda* (*KP*) – which has one of the highest circulation numbers – approximately 100,000. *KP* positions itself as the ‘most important source of official and business information’ in Kazakhstan. Founded in 1920, it is the oldest mainstream newspaper in the country (*Kazakhstanskaya Pravda* 2019). In Kazakhstan, there is little competition between print media (Rollberg and Laruelle 2015; Heinrich and Pleines 2018), and therefore our focus on *KP* allows us to explore the evolving national agendas as primarily reflective of state-controlled media set within an authoritarian political system. As *KP* is printed in Russian, which is the second official language in the country, this linguistic proclivity is also reflective of an established ‘symbiotic relationship between CA and Russian media environments’ with both countries demonstrating strong preferences for ‘a variation of “mild authoritarianism” over full-fledged emulation of Western-style democracies’ (Rollberg and Laruelle 2015: 228-9). Scholars of climate change communication in Russia draw attention to the stabilising effect of the decades-long political leadership on the patterns of climate change communication (Poberezhskaya 2015; 2016; Boussalis *et al.* 2016). This finding is relevant to the context of Kazakhstan, a country in which President Nursultan Nazarbayev stayed at the helm from 1991 until early 2019. Although the state-controlled media landscape highlights the importance of analysing the official discourse, we acknowledge that, by studying this one official media outlet, we will not paint a complete picture of climate change communication in Kazakhstan, particularly because our study excludes social media which presents a platform for environmental activism in the country (Weinthal and Watters 2010; Karimova *et al.* 2018).

The analysed news articles were extracted from the East View database (<http://online.eastview.com/>). Our dataset included news articles published in *KP* between 2000 and 2017. The choice of this time period is justified by two - practical/conceptual - considerations, including the availability of data and progressive engagement of the Kazakh leadership in global climate policies from 2000 onwards. Our unit of analysis was the whole news article.ⁱⁱ A total of 920 texts were selected using keyword searches, including all

grammatical variations of ‘climate change’, ‘global warming’ and ‘GHG effect’, appearing in any section of the newspaper.

The coding protocol for quantitative frame analysis was largely informed by extensive scholarship relating to the media framing of climate change (Bowe *et al.* 2014; Chetty *et al.* 2015; Belfer *et al.* 2017; Matthews 2017; Roxburgh *et al.* 2019). As mentioned above, drawing on the typologies of climate change frames developed by Pandey and Kurian (2017), and Dirikx and Gelders (2010), we explored the recurrence of three main frames occurring in *KP*: the ‘conflict frame’, ‘consequences frame’, and ‘responsibility frame’ⁱⁱⁱ. The ‘conflict frame’ was utilised to capture the contrasting interpretations of climate change science. We measured this frame via a five-point-scale which ranged from anthropogenic climate change being ‘confirmed’, ‘questioned’, ‘denied’, ‘reason [for climatic changes are] not mentioned’ or ‘historical climate change’ is discussed instead. We use two coding procedures to capture the utilisation of the ‘consequences frame’. Firstly, we coded the positive and negative associations with climate change captured through a polarised - ‘benefit’ versus ‘negative impact’ - frame. Secondly, we coded ‘consequences’ through the identification of the main contextual settings within which climate change was mentioned including: science, economy, energy, international relations (IR), domestic politics, activism, society, and agriculture. In this instance, we used each textual statement as a unit of analysis, with different statements from the same article being coded more than once. For instance, if climate change was mentioned as part of an international summit within the discussion of renewable energy sources, then we attributed this statement to both the ‘IR’ and ‘Energy’ contextual codes.

Finally, we explored the prominence of the ‘responsibility frame’ through the attribution of responsibilities/blame to national and international actors. Our two-fold coding of ‘responsibility’ diverged from Pandey and Kurian’s (2017) approach, who utilised cross-country comparison as a means of capturing the differences between *national* frameworks of climate change coverage in the United States (US), the United Kingdom (UK), India and China, and as a result, they did not analyse the framing of climate change views of various international actors. Conversely, our focus on a single case-study allows for the investigation of the framing of responsibilities/blame attributed to both national and international actors, a code which we considered a key indicator of the level of openness to global climate change cooperation.

Both authors participated in the data analysis, which included extensive discussions of each code to ensure validity and reliability of coding protocol. Furthermore, each researcher coded independently a randomly selected sample (constituting 10% of the dataset (n=91))

(O'Connor and Joffe 2020). Intercoder reliability has been measured using Cohen's kappa with results ranging from $k = 0.847$ to $k = 1.0^{iv}$ with an average reliability score 0.907 and are at acceptable levels (Landis and Koch 1977; Gwet 2014).

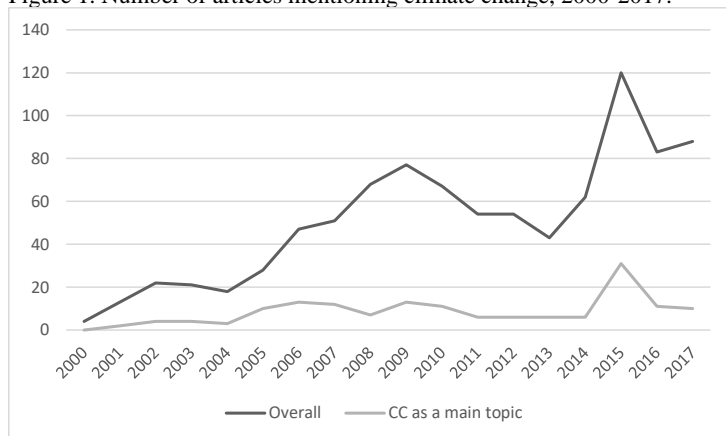
To enrich our understanding of climate change communication in Kazakhstan we also deployed qualitative frame analysis. The qualitative part of conducted frame analysis is aimed at identifying a 'metamessage' (Tannen 1993: 3) or 'a central organising idea, or a frame' (Gamson and Modigliani 1989: 3). Such a method allows us to explore the subtle meanings and/or omission of ambiguous issues commonly utilised in the state-controlled media of post-Soviet authoritarian countries (Poberezhskaya 2015; Rollberg and Laruelle 2015). As Entman (1993: 54) argues 'the frame determines whether most people notice and how they understand and remember a problem, as well as how they evaluate and choose to act upon it'. Climate change coverage poses a particularly important subject of frame analysis as it does not only help us to understand the position of the key stakeholders on the issues (especially in authoritarian states with significant media control) but it also impacts on public understanding (Boykoff 2012). Furthermore, as Gunay *et al.* (2018: 103) state 'the media's effective frame utilization [...] can prompt public engagement or social movements on social issues like climate change'. We use this method to further elaborate on the framing of national/international responsibilities/blame as the indicators informative of the patterns of climate change communication. Our interpretations derive from the expanding scholarship relating to political and economic developments, particularly from the studies of resource nationalism in Eurasia (Domjan and Stone 2010; Koch and Perreault 2019; Laruelle 2016).

Climate change coverage in Kazakhstan: salient and silent points

Although the overall distribution of news articles over the years follows the global trend with climate change becoming a more salient issue and peaking around major international events such as COP-15 in 2009 or COP-21 in 2015, the relatively modest volume of coverage corresponds with the level of attention paid to climate change in Russia rather than its Western counterparts (Boussalis *et al.* 2016) (see Figure 1). Moreover, the data suggests, though inconclusively, that economic crises, be it the global economic crisis of 2008-9 or the regional economic crisis of 2014, do not lead to substantial changes in the volume of climate change coverage. Instead, we observe the framing of climate change as an economic opportunity, and a 'resource' (Wilson 2015). For instance, in 2017 Astana hosted an international exposition 'Expo 2017' under the theme 'Future Energy' which, from 2012 (when the decision on the host

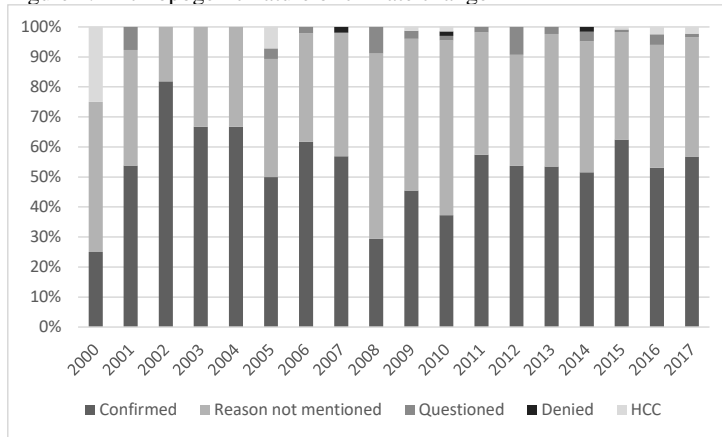
was made), consistently reappeared in *KP* climate change coverage within the context of the global/regional drive towards sustainable energy.

Figure 1. Number of articles mentioning climate change, 2000-2017.



The suggested convergence between climate change coverage and economy/energy-related topics can also be one of the main factors explaining the prominence of support for the anthropogenic vision of climate change. As Figure 2 demonstrates most of the articles (n=488) confirm the anthropogenic nature of climate change, whilst in the remaining news articles (n=393) climate change is discussed without any indication of its causes.^v In less than 3% of cases (n=26) the anthropogenic nature of climate change was questioned, and it was denied in only 3 cases. There were also 10 news articles where authors referred to historical climate change.

Figure 2. Anthropogenic nature of climate change

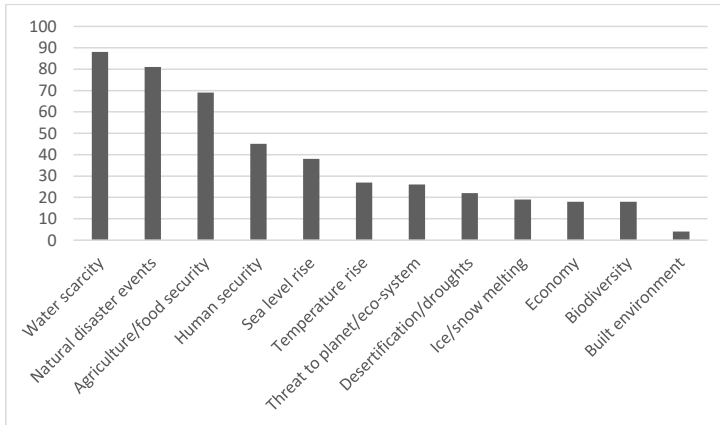


In other words, the coverage in *KP* is not dictated by the pursuit of ‘balanced reporting’ (Boykoff 2007). The reason for the absence of sceptical and/or denialist statements in the studied coverage could be explained by two factors. Firstly, Kazakhstan, like other CA states, has suffered from the Soviet legacy of environmental ‘mismanagement and under-investment’ (Fay *et al.* 2010; Henry 2010; Nugumanova *et al.* 2017). The most notable examples of the Soviet ‘man-made’ catastrophes include the progressive disappearance of the Aral Sea, the Semipalatinsk wasteland resulting from the Soviet nuclear weapons testing programme (1949-91), and degradation of agricultural land due to the depletion of nutrients during the Soviet ‘Virgin Lands Campaign’ (late 1960s-early 1980s).

The second explanation for the near absence of climate change scepticism could be linked to Kazakhstan’s contemporary drive towards economic modernisation and development through practicing carbon-intensive economic development whilst opening itself up for international sustainable energy related projects. For instance, according to an OECD report (2016), in 2013-14 Kazakhstan received ‘about \$346.7 million of global climate-related development finance’, more than any other country in CA. In sum, both historical and contemporary factors shape the framing of climate science through the lens of its anthropogenic nature whilst also limiting the discursive space for expressing climate scepticism.

Notably, there is also very little mention of the supposedly positive climate change consequences. In only 8 news articles the author(s) referred to potentially softer winters (in the Northern part of the country) or some abstract ‘unexpected benefits’. Instead, the coverage provides a rich account of possible negative implications of climate change (see Figure 3).

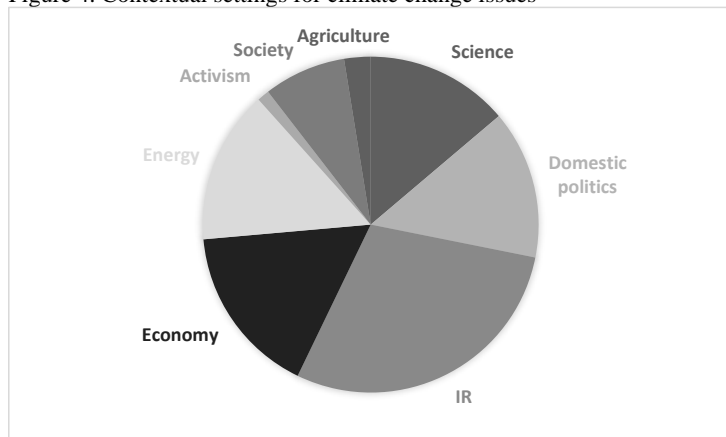
Figure 3. Negative impact of climate change.



Pandey and Kurian (2017) identified that the emphasis on climate change consequences constitutes one of the cornerstones of climate coverage in both developed and developing countries. The peculiarity of Kazakhstan is that the coverage links the negative implications of climate change largely with pre-existing climate vulnerabilities (see Figure 3), that are widely discussed within existing scholarship. For example, Kazakhstan as a semi-arid and arid region of CA is considered to be ‘highly vulnerable to changes in climate’ with a very limited ‘adaptive capacity’ (Deng and Chen 2017; Fay *et al.* 2010). It is also acknowledged that, if climate change carries on with its predicted destructivity, the region will soon face a hard choice between ‘water for agriculture or water for energy’ making Kazakhstan one of the world’s most water-stressed states (World Bank 2014; Bernauer *et al.* 2012; Nugumanova *et al.* 2017). In view of this scholarship, it may not be surprising that the coverage capitalises on pre-existing geography-based vulnerabilities. However, within the context of climate change communication, this approach presents climate change as an ‘uncontrollable threat’, which gives ‘the impression that the problem is “just too big to cope with” and that personal actions are not useful’ (Dirikx and Gelders 2010: 739). Reflecting this trend, in *KP* the rich account of pre-existing vulnerabilities is largely dissociated from either personal or governmental responsibility. It omits the negative implications arising from the structure of Kazakhstan’s carbon-intensive industrial development, a factor that significantly contributes to Kazakhstan’s environmental problems (Nugumanova *et al.* 2017: 1).

International politics and economy/energy – are popular frames in the media coverage of climate change in other countries (Chetty *et al.* 2015; Pandey and Kirian 2017; Aitu 2017) and the *KP* follows this trend (see Figure 4).

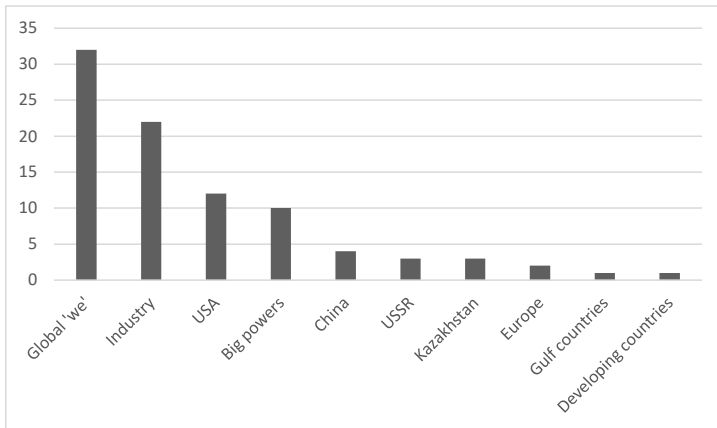
Figure 4. Contextual settings for climate change issues



In fact, one third of all studied publications (31%) mentioned climate change within or next to a discussion of Kazakhstan’s commitment to the development of sustainable economic growth, implementation of sustainable energy projects or its transition to a ‘green economy’ without much discussion of how these initiatives will impact fossil fuel-driven industry. Moreover, the coverage marginalises the depiction of climate change as a societal problem, a trend which many scholars see as the most productive avenue for engaging the wider population in climate change debate (e.g. Dirikx and Gelders 2010).

Finally, contrasting with the findings of previous studies (e.g. Pandey and Kurian 2017), in our dataset only 90 out of 920 articles attributed the blame and/or responsibility for anthropogenic climate change to either national or international actors (see Figure 5).

Figure 5. Responsibility/blame allocation for anthropogenic climate change.



The two most popular categories either imply an abstract concept of ‘we’ or a general idea of polluting industry, without much detail. This is followed by a slightly more defined category of ‘big powers’, and it is only on a few occasions that blame was attributed to a specific country – USA, China and the Soviet Union (not Russia) (10, 4 and 3 publications, respectively). Only 3 times was Kazakhstan accused of contributing to climate change and identified as needing to take more responsibility. These findings do not offer a straightforward explanation of the framing of responsibility/blame. For instance, in India the media coverage of climate change tends to comment on the historical responsibilities of the former colonisers (Billett 2010), but in our dataset the historical responsibilities of the Soviet Union and Russia (as a successor state) are barely mentioned. Equally, we do not observe a clear discursive polarisation between Kazakhstan and the other as indicative of the ‘us vs. them’ frame (Belfer et al 2017). In the following section, we use qualitative frame analysis to enrich our understanding of the responsibilities for climate change attributed to national and international actors.

The framing of national/international responsibilities for climate change

As per Wilson’s (2015) definition of resource nationalism, we argue that it enables reframing of climate change as a valuable ‘resource’ over which Kazakhstan’s leadership claims its ownership and control. Furthermore, as resource nationalism is traditionally linked to the state’s control over natural resources (*ibid*), the application of this frame to cover climate change dynamics can explain why in our dataset the efforts directed at the decarbonisation of the economy are largely represented as compatible with Kazakhstan’s reliance on the extraction

of fossil fuels and support for the carbon intensive economy as well as its drive to claim regional/international leadership in climate change mitigation efforts. .

Nazarbayev and climate change

In Kazakhstan, the major oil/gas fields were discovered in the mid-1980s and the first international contracts signed in the early 1990s (Domjan and Stone 2010). These historical developments allowed the Kazakh government to claim that energy-based rents were acquired by President Nazarbayev's skilful leadership (Matveeva 2010; Marat 2010). Reflecting the emphasis on resource nationalism, in *KP* the figure of Nazarbayev is imbued with both economic and climate change expertise (e.g. Kapparov 2012). He is often described as a leader who translates the topic of global climate change into the domestic public discourse through such government-led initiatives as 'the Green Bridge'^{vi}:

The historical significance of the 'Green Bridge' partnership program lies in a comprehensive and systematic approach to resolving issues related to two main factors - climate change and global energy security (Nurgaliev 2014).

This discursive convergence of climate change and energy/economic modernisation functions as a key framing device of depicting climate change as a national, state-controlled economic 'resource'. For instance:

Kazakhstan's accession to the global climate agreement should be considered as a new opportunity to modernize and diversify not only the energy sector, but also the country's entire economy (Essekin 2016).

The emphasis on energy in climate change coverage reflects the energy-centric decision-making policy structure which is headed by the President, the Parliament and the Government, whilst the Ministry of Energy oversees policy implementation and represents the country during international negotiations (Ministry of Energy of the RK 2017). Among the state's most recent achievements in reducing GHG emissions, Kazakhstan's political representatives list the 'Concept of transition of the Republic of Kazakhstan to a green economy', the 'Energy conservation 2020' programme, the 'Energy saving and energy efficiency' law, 'Supporting the use of Renewable energy sources', and implementation of an emissions trading scheme (ETS) (*ibid*). It is worth mentioning that Kazakhstan was the first country in the post-Soviet space which implemented an ETS (Nugumanova *et al.* 2017).

Recognising these successes, our analysis shows that resource nationalism-focused framing leads to two problematic implications for climate change communication. Firstly, although the *KP* coverage shows continuous governmental support for ‘green’ technologies and sustainable development, it prioritises the goal of national energy-focused development. This emphasis mirrors the marginal role of climate-related topics in the structure of the Kazakhstan 2030 strategy, in which ‘the ideology of modernisation, development and legitimisation’ (Kudaibergenova 2015: 440) come across seven priority areas (national security, political stability, economic growth, education and population well-being, energy resources, and infrastructure), whilst environment and climate change are barely discussed. Secondly, the framing of climate change policy as Nazarbayev’s achievement (Kudaibergenova 2019; see also Matveeva 2010; Sordi 2016) leaves little space for acknowledging the contribution of non-state actors in climate change mitigation efforts (Weinthal and Witters 2010) and hinders framing climate change consequences and responsibilities as matters that directly concern the wider population. This discursive omission projects the idea that the Kazakhstani population can equally benefit from government-led climate-related projects, as it has presumably benefitted from the extraction of natural resources (Koch and Perreault 2019). However, as Sakal (2015: 249) argues, subsequent income from natural ‘resource rents’ has been distributed unevenly across the country, with ‘the rhetorical aspect of “resource nationalism” used to cover the problems of poverty and human development and achieve legitimacy in view of low democracy level and authoritarian rule’. As under-development and socio-economic inequality is set to increase due to climate change (Fay *et al.* 2010), this discursive dissociation of climate change from regional climate vulnerabilities and inequalities fails the local population.

The Soviet Union/Russia and climate change

As we previously indicated, within the studied dataset the role of the Soviet Union and Russia was largely communicated through omissions and reframing. On multiple occasions, although the Soviet-era environmental crises like the degradation of the Aral Sea and the legacy of nuclear testing (the area around Semipalatinsk) were mentioned alongside climate change, these issues appeared without an in-depth discussion, and an attribution of responsibility to Russia as a successor of the Soviet Union. For instance:

any student can list the troubles of our ecology: two-thirds of the country's territory is subject to desertification, the Semipalatinsk test site constantly reminds of itself, a sword of Damocles hangs over two reservoirs - Aral and Balkhash ... It is clear why the republic gives the environmental problems a special status (Altaev 2004).

Nursultan Nazarbayev, when speaking about sustainable development in CA, once again reminded those attending that Kazakhstan, after the chaotic breakdown (*razval*) of the Soviet Union was left standing alone with a multitude of economic, political and ecological problems (Samakova 2004).

The reporting on the Soviet environmental legacies shies away from attribution of responsibility/blame to Russia, and instead, it contrasts the stabilizing policies enacted by President Nazarbayev from 1991 onwards with the Soviet Union's chaotic disintegration (*'razval'*) in 1991. Importantly, the coverage does not appeal to Russia to take on historical responsibility or to invest more in climate change mitigation projects. This lack of coverage on the historical and contemporary responsibility of the Soviet Union/Russia can be explained by the unwillingness of the Kazakh leadership to 'frame the debate in terms of whether the Soviet past was good or bad' to not 'undermine the past foundations which many among his fellow countrymen hold dear' (Matveeva 2010: 22). As Kudaibergenova (2016: 918) explains, postcolonial discourse in Kazakhstan expresses itself through the 'compartmentalised national identity' based on 'the inability of both the regime and other Kazakhstani political actors to acquire clear positionality *vis-à-vis* former oppressors'.

Importantly, in the studied coverage, we observe minimal references to Russia's actions in the context of climate change. Occasionally, the coverage mentions productive cooperation between Kazakhstan and the modern Russian state in the areas of environmental and climate change politics. Paradoxically, the vagueness of reporting on Russia's environmental record undermines Kazakhstan's own achievements in global climate change projects by omitting the rather controversial climate change record of the Russian government (Poberezhskaya 2015). While not critically assessing Russia's climate policy, the analysed news articles also do not expose Kazakhstan's geopolitical vulnerabilities arising from its relations with Russia as a country with which Kazakhstan is closely economically and politically linked (Kudaibergenova 2016; Laruelle *et al.* 2019). Moreover, this vague framing undermines similarities between two countries in terms of resource nationalism-driven policies (Domijan and Stone 2010). In both countries, climate change policies are administered by the energy-focused authoritarian government structures which prioritise interests of the fossil fuel-based economy over climate concerns.

Kazakhstan and international partners

The coverage presents Kazakhstan as an active member of the international climate change community or even a regional/ international leader. For instance:

By analysing the final documents of these meetings, one gets convinced that Kazakhstan is at the front row of the global movement (Makhin 2002).

Environmental challenges are worse than any war, so countries need to stop spending money on weapons, and direct them to overcome the effects of global climate change. [...] Our President calls for this, and the importance of such activities can hardly be overestimated (Eleusizov 2010).

Kazakhstan is shown as a country open to global climate change collaboration. This framing is reflective of Kazakhstan's policy of national image-making. As Marat (2010: 45) points out 'since the 1990s, Kazakhstan has been investing large sums of money to ameliorate its international image' (see also Laruelle 2016; 2018). Indeed, over the years, the Kazakh leadership has emphasised that they offer a stable political situation, strive for economic development and are open to foreign investors (Kudaibergenova 2015). This rhetorical policy is seen as a reflection of the 'accompanying pragmatism' of Kazakhstan's political elites (Collins and Bekenova 2017: 15). Moreover, we observe a subtle reframing of global climate change responsibilities characterised by the limited polarisation between Kazakhstan and others (Belfer *et al.* 2017) where media does not explicitly paint the climate change discussion in terms of 'villains' (the countries whose economic activities caused climate change) and 'victims' (the countries that suffer from climate change's consequences or suggested mitigation policies) Instead, in our sample, the 'global we' code only hints at the hierarchy between developed and developing countries, with the latter emerging as recipients of global climate change funds. This vague rhetoric aligns Kazakhstan with developing countries and suggests that funds for climate related projects should come from the West. For instance:

annual investments in the form of modern and efficient technologies from developed countries in exchange for Kazakhstan's GHG emissions quotas may exceed one billion dollars. This technological transfer will mainly be directed to our energy sector, where equipment depreciation reaches 60 percent, and its modernization requires significant investment (Shimanskiy 2009).

The ambiguous discussion also reflects Kazakhstan's own limited record in global climate cooperation. Climate Action Tracker (2018) rates Kazakhstan's GHG reduction commitments as 'insufficient' due to the country's over-reliance on fossil fuel extraction in contrast to modest development targets surrounding renewable energy. Although Kazakhstan ratified the Paris agreement by the end of 2016, it has two sets of targets in reducing its GHG emissions, unlike many other countries. The modest target of a 15% reduction below 1990 levels by 2030 is introduced as 'unconditional' and the target of a 25% reduction is 'conditional' on the extent of international funding. Thus, this structure of official climate goals highlights the existing tension between Kazakhstan's own modest climate change commitments and substantial expectations attributed to international actors, particularly more economically advanced countries.

To sum up, our findings demonstrate that the instrumental use of climate change as another 'resource' to the benefit of the government leads to a rather superficial approach to climate change discussions within the studied media coverage. There are some benefits in covering this environmental problem from an angle of sustainable development (as it does not antagonise the authoritarian government with strong interests in the fossil fuel industry) but, considering the country's geographical vulnerabilities and the carbon intensity of its economy, climate change needs to be addressed explicitly without masking it by the 'win-win' rhetoric of 'the green economy'. This, of course, requires acknowledgement of the fossil fuel industry's responsibility (both historical and contemporary) for environmental degradation. As Kazakhstan treasures its international image and relations with Western partners, it can capitalise on a more pro-active climate change stance. Furthermore, for a qualitative change to happen, discussion needs to include the voices of civil society and engage the wider population in climate change communication. Whilst Kazakhstan is indeed capable of becoming at least a regional leader in mitigating climate change (due to its great potential for energy efficiency and diversification of the economy), the required rhetorical change needs to be followed by concrete steps.

Conclusion

The conducted analysis demonstrates that despite Kazakhstan being a fossil fuel rich country with an authoritarian regime it does not show the expected signs of climate scepticism. Considering Kazakhstan's economic interest in global multilateral green climate funds (GCF 2019), and its positioning as a regional leader in climate change policies through hosting

international and regional conferences (e.g. Freedman 2014), evidently there is no pragmatic need for the state to undermine climate change's anthropogenic nature. Therefore, we argue that the depiction of climate science does not only depend on the type of political regime (e.g. democracy versus authoritarian/semi-authoritarian), but also reflects country-specific historical and contemporary political realities. For example, similar to Billett's (2010) analysis of the Indian media, Kazakhstan's press redefines climate change as a socio-environmental issue placed within a specific national context, rather than a 'distant/global scientific process'.

It becomes unsurprising that the Kazakh leadership, personified in the figure of now former President Nursultan Nazarbayev, is represented as a responsible climate change actor. This framework is sustained through the allusions to resource and energy-focused nationalism. Hence, we problematise the connection between developing countries' drive towards economy/energy-focused growth and climate change through the frame of resource nationalism, particularly for countries with rich fossil fuel reserves. Furthermore, the conducted analysis supports the argument of a diverse nature of resource nationalism as 'political, economic and cultural' phenomenon (Koch and Perreault 2019). In our case the fact of environmental degradation – climate change – becomes another 'resource' which is used to deprioritise climate change policies whilst also strengthening the state's economic ambitions. This is an important finding since although Kazakhstan invests in international climate related projects implemented in the country, the government's climate obligations are generally modest, and offset by commitment to the extraction of fossil fuels and uranium mining (Kerimray *et al.* 2016). Kazakhstan's economy which is responsible for 0.7% of global emissions (OECD 2016) is not discussed from this angle within the studied data. Therefore, the overarching frame of resource nationalism leaves little space for acknowledging national climate responsibility, resolving the controversy over an ambiguous framing of Russia's role in climate change mitigation efforts or reporting on a multitude of climate change consequences affecting the wider population in Kazakhstan and around the world.

Finally, our analysis of climate change-related responsibilities highlights the importance of viewing them through the prism of historical and contemporary vulnerabilities. We argue that authoritarian/semi-authoritarian developing countries present a particular interesting case-study as they simultaneously seek to invite global climate change donors whilst ensuring that they would preserve state-control over the management of national economic and environmental resources. Moreover, although many of those countries have experienced a

prolonged period of resource-exploitation by former colonial powers, the analysis of climate change communication should not assume that the former colonisers would always be blamed for climate change and environmental degradation as in the case of Kazakhstan-Russia relations. Similarly, the Kazakh press does not identify China and India, which are amongst the largest contemporary GHG emitters, as climate change villains. Instead, coverage implies that Western countries should do more to elevate climate change risks. In other words, although our analysis highlights some elements of ‘carbon colonialism’ rhetoric (Billett 2010), it is not underpinned by references to historical emissions. Instead, climate change communication is driven by a pragmatic foreign policy which simultaneously strengthens the regime through representing Kazakhstan as a regional leader and an important international actor of global sustainable development.

Due to CA’s climate vulnerability and low level of adaptability to environmental risks, climate change mitigation should be seen as ‘the main condition for the prosperity and development of the region’ (*Sputnik* 2018). Our analysis of patterns and drivers of climate change communication in Kazakhstan has revealed a reductive understanding of national and global climate change responsibility. We argue that to understand how and why climate change is framed in politically restricted societies, we ought to look more specifically at how their governments can benefit from climate change discussion and what role it can play in sustaining the regime. Our analysis, whilst not without its limitations (as mentioned above), can serve as a useful starting point for further research inquiries in how climate change concerns in CA and (semi-)authoritarian developing states can be productively reframed to advance global climate change mitigation efforts.

Bibliography

- Abenova, S., 2017. S uchetom opyta OESR. *Kazakhstanskaya Pravda*, 12/07/2017.
- Aitu, D., 2017. Davos-2017: bioritmy global'noi politiki. *Kazakhstanskaya Pravda*, 3/02/2017.
- Altaev, V., 2004. Novye ramki ustoichivogo razvitiya', *Kazakhstanskaya Pravda*, 26/05/2004.
- Antilla, L., 2005. Climate of scepticism: US newspaper coverage of the science of climate change. *Global Environmental Change*. 15: 338–352.
- Beck, U. 1994. *Risk Society. Towards New Modernity*. London: Sage Publication.
- Belfer, E., Ford, J., Maillet, D., 2017. Representation of Indigenous peoples in climate change reporting. *Climatic Change*. 145(1): 57–70.
- Bell, A., 1994. Climates of opinion: Public and media discourse on the global environment. *Discourse and Society*. 5(1): 33–64.
- Bernauer, T., Siegfried, T. and Gleditsch, N. P., 2012. Climate change and international water conflict in Central Asia. *Journal of Peace Research*. 49(1): 227-239.
- Billett, S., 2010. Dividing climate change: global warming in the Indian mass media. *Climatic Change*. 99(1): 1–16.
- Boussalis, C., Coan, T. and Poberezhskaya, M., 2016. Measuring and modelling Russian newspaper coverage of climate change. *Global Environmental Change*. 41: 99–110.
- Bowe, B.J. *et al.*, 2014. Framing of climate change in newspaper coverage of the East Anglia e-mail scandal. *Public Understanding of Science*. 23(2): 157–169.
- Boykoff, J., 2012. US media coverage of the Cancún climate change conference. *PS: Political Science & Politics*. 45(2): 251–258.
- Boykoff, M. and Boykoff, J., 2004. Balance as bias: global warming and the US prestige press. *Global Environmental Change*. 14: 125–136.
- Boykoff, M., 2007. Flogging a dead norm? Newspaper coverage of anthropogenic climate change in the United States and United Kingdom from 2003 to 2006. *Area*. 39(4): 470-481.
- Carvalho, A., 2005. Representing the politics of the greenhouse effect: discursive strategies in the British media. *Critical Discourse Studies*. 2(1): 1–29.
- Chetty, K., Devadas, V., Fleming, J., 2015. The framing of climate change in New Zealand newspapers from June 2009 to June 2010. *Journal of the Royal Society of New Zealand*, 45(1): 1–20.

Formatted: English (United Kingdom)

Climate Action Tracker, 2018. Country Summary, available at <https://climateactiontracker.org/countries/kazakhstan/>, (accessed 05/04/2019)

Collins, N. and Bekenova, K., 2017. Fuelling the New Great Game: Kazakhstan, energy policy and the EU. *Asia Europe Journal*. 15(1): 1-20.

Davidson, C. and Graham, D., 2014. Newspaper reporting on climate change, green energy and carbon reduction strategies across Canada 1999–2009. *American Review of Canadian Studies*. 44 (2): 151–168.

Deng, H. and Chen, Y., 2017. Influences of recent climate change and human activities on water storage variations in Central Asia. *Journal of Hydrology*. 544: 46-57.

Dirikx, A., Gelders, D., 2010. To frame is to explain: a deductive frame-analysis of Dutch and French climate change coverage during the annual UN Conferences of the Parties. *Public Understanding of Science*. 19(6): 732–742.

Domjan, P. and Stone, M., 2010. A comparative study of resource nationalism in Russia and Kazakhstan 2004-2008. *Europe-Asia Studies*. 62(1): 35-62.

Doulton, H. and Brown, K., 2007. 'Ten years to prevent catastrophe'? *Discourse of climate change and international development in the UK press*. Tyndall Centre for Climate Change Research, Working Paper 111.

Eleusizov, M., 2010. Ne vooruzhat'sya, a ob'edinyat'sya. *Kazakhstanskaya Pravda*, 03/12/2010.

Entman, R., 1993. Framing: toward clarification of a fractured paradigm. *Journal of Communication*. 43(4): 51-58.

Essekin, B., 2016. Global'nye trendy nizkouglerodnogo razvitiya, *Kazakhstanskaya Pravda*, 06/08/2016.

Fay, M., Block, R. and Ebinger, J. (eds.), 2010. *Adapting to climate change in Eastern Europe and Central Asia*. Washington, DC: World Bank.

Freedman, E., 2014. Barriers to coverage of transborder environmental issues in the Ferghana Valley of Central Asia. *Applied Environmental Education and Communication*. 13(1): 48–55

Gamson, W. and Modigliani, A. 1989. Media discourse and public opinion on nuclear power: a constructionist approach. *American Journal of Sociology*. 95: 1-37.

Gavin, N. and Marshall, T., 2011. Mediated climate change in Britain: scepticism on the web and on television around Copenhagen. *Global Environmental Change*. 21(3): 1035–1044.

Gavin, N., Leonard-Milsom, L., and Montgomery, J., 2011. Climate change, flooding and the media in Britain. *Public Understanding of Science*. 20(3): 422-438.

GCF (2019) *Country profile: Kazakhstan*, Green Climate Fund, <https://www.greenclimate.fund/countries/kazakhstan> (accessed 05/04/2019).

Grundmann, R., Scott, M., 2014. Disputed climate science in the media: do countries matter? *Public Understanding of Science*. 23(2): 220-235.

Gunay, D., Iseri, E. and Ersoy, M., 2018. Alternative media and the securitization of climate change in Turkey. *Alternatives: Global, Local, Political*. 43(2): 96-114.

Gwet, K. L. 2014. *Handbook of Inter-Rater Reliability*, Fourth Edition. Gaithersburg: Advanced Analytics, LLC.

Heinrich, A. and Pleines, H., 2018. The meaning of 'limited pluralism' in media reporting under authoritarian rule. *Politics and Governance*. 6(2): 103-111.

Henry, L., 2010. Between transnationalism and state power: the development of Russia's post-Soviet environmental movement. *Environmental Politics*, 19(5): 756–781.

Kapparov, N., 2012. Sokhranit' prirodu na ekonomichestki vygodnoy osnove, *Kazakhstanskaya Pravda*, 03/04/2012.

Karimova, B., Alimbekova, S., Mukhatova, A., 2018. Ecological problems in mass media in Kazakhstan. *Journal of Pharmaceutical Sciences and Research*. 10(6): 1422–1427.

Kassen, M., 2018. Understanding foreign policy strategies of Kazakhstan: a case-study of the landlocked and transcontinental country. *Cambridge Review of International Affairs*. 31(3-4): 314-343.

Kassenova, T., 2010. Uranium production and nuclear energy in Central Asia: assessment of security challenges and risks. *China and Eurasia Forum Quarterly*. 8(2): 221-241.

Kazakhstanskaya Pravda, 2019. O Gazete. Available at <https://www.kazpravda.kz/page/view/o-gazete> (accessed 15/01/2019).

Kerimray, A. *et al.*, 2016. Climate change mitigation scenarios and policies and measures: the case of Kazakhstan. *Climate Policy*. 16(3): 332-352.

Kim, K.S., 2011. Public understanding of the politics of global warming in the news media: the hostile media approach. *Public Understanding of Science*. 20(5): 690–705.

Koch, N. and Perreault, T., 2019. Resource nationalism. *Progress in Human Geography*. 43(4): 611-631.

Kudaibergenova, D., 2015. The ideology of development and legitimation: beyond "Kazakhstan 2030". *Central Asian Survey*, 34(4): 440-455.

Kudaibergenova, D., 2016. The use and abuse of postcolonial discourses in post-independent Kazakhstan. *Europe-Asia Studies*. 68(5): 917-935.

Kudaibergenova, D., 2019. Compartmentalised ideology: presidential addresses and legitimation in Kazakhstan. In: R. Isaacs and A. Frigerio (eds) *Theorizing Central Asian politics. The state, ideology and power*. London: Palgrave: 145-166.

Landis, J. R. and Koch, G. G. 1977. The measurement of observer agreement for categorical data. *Biometrics*, 33: 159-174.

Laruelle, M. (ed), 2016. *Kazakhstan in the making: legitimacy, symbols and social change*. Lanham: Lexington Books.

Laruelle, M. (ed), 2018. *China's belt and road initiative and its impact in Central Asia*, Washington, D.C.: The George Washington University.

Laruelle, M. and Peyrose, S., 2015. *Globalizing Central Asia: geopolitics and the challenges of economic development*. London: Routledge.

Laruelle, M., Royce, D. and Beyssembayev, S., 2019. Untangling the puzzle of "Russia's influence" in Kazakhstan. *Eurasian Geography and Economics*. 60(2): 211-243.

Lockwood, A., 2009. Preparations for a post-Kyoto media coverage of UK climate policy. In: T. Boyce and J. Lewis (eds), *Climate change and the media*. New York: Peter Lang, 186-199.

Makhin, V., 2002. Grani ustoichivogo razvitiya. *Kazakhstanskaya Pravda*, 11/07/2002.

Marat, E., 2010. Nation branding in Central Asia: a new campaign to present ideas about the state and the nation. In: S. Cummings (ed) *Symbolism and power in Central Asia: politics of the spectacular*. London: Routledge, 39-52.

Matthews, J., 2017. Maintaining a politicised climate of opinion? Examining how political framing and journalistic logic combine to shape speaking opportunities in UK elite newspaper reporting of climate change. *Public Understanding of Science*. 26(4): 467-480.

Matveeva, A., 2010. Legitimising Central Asian authoritarianism: political manipulation and symbolic power. In: S. Cummings (ed) *Symbolism and power in Central Asia: Politics of the spectacular*. London: Routledge, 12-38.

Ministry of Energy of the RK, 2017. *Kazakhstan. Biennial Reports (BR). BR 3. National Communication (NC)*. NC 7, available at <https://unfccc.int/documents/28937>, (accessed 27/05/2018).

Nugumanova, L. et al., S., 2017. *Environmental problems and policies in Kazakhstan: air pollution, waste and water*. Working Papers 366, Leibniz Institut für Ost- und Südosteuropaforschung (Institute for East and Southeast European Studies).

Nurgaliev, D., 2014. Potensial "zelenogo rosta", *Kazakhstanskaya Pravda*, 04/07/2014.

O'Connor, C. and Joffe, H., 2020. Intercoder reliability in qualitative research: debates and practical guidelines. *International Journal of Qualitative Methods*, 19: 1-13.

OECD, 2016. Financing climate action in Kazakhstan. Country study, OECD Green Action Programme, https://www.oecd.org/environment/outreach/Kazakhstan_Financing_Climate_Action.Nov2016.pdf. (accessed 30/07/2018)

Field Code Changed

Formatted: German (Germany)

Formatted: German (Germany)

- Olausson, U., 2009. Global warming - global responsibility? Media frames of collective action and scientific certainty. *Public Understanding of Science*. 18(4): 421-436.
- Pandey, C.L.L. and Kurian, P.A.A., 2017. The media and the major emitters: Media coverage of international climate change policy. *Global Environmental Politics*, 17(4): 67-87.
- Perelet, R., 2010. Climate change and water security: implications for Central Asia, *China and Eurasia Forum Quarterly*. 8(2): 173 -183.
- Poberezhskaya, M., 2015. Media coverage of climate change in Russia: Governmental bias and climate silence. *Public Understanding of Science*. 24(1): 96-111.
- Poberezhskaya, M., 2016. *Communicating climate change in Russia: state and propaganda*. Abingdon: Routledge.
- Rollberg, P. and Laruelle, M., 2015. The media landscape in Central Asia: introduction to the special issue. *Democratizatsiya*. 23(3): 227-232.
- Roxburgh, N. *et al.*, 2019. Characterising climate change discourse on social media during extreme weather events. *Global Environmental Change*. 54: 50-60.
- Sakal, H.B., 2015. Natural resource policies and standard of living in Kazakhstan. *Central Asian Survey*. 34(2): 237-254.
- Samakova, A., 2004. Ustoichivost' kak osnova uspekha. *Kazakhstanskaya Pravda*, 24/05/2004.
- Shimanskiy, M., 2006. I zazvuchat akkordy Marrakesha. *Kazakhstanskaya Pravda*, 27/01/2006.
- Shimanskiy, M., 2009. Podnyat' planku otvetstvennosti. *Kazakhstanskaya Pravda*, 29/01/2009.
- Sordi, A.D., 2016. Legitimation and the party of power in Kazakhstan. In M. Brusis *et al.* (eds), *Politics and Legitimacy in Post-Soviet Eurasia*, London: Palgrave: 72-96.
- Sputnik, 2018. Ekolog rasskazal, chem grozit Tsentral'noy Azii global'noe poteplenie, *Sputnik*, 24/01/2018, available at <https://sptnkne.ws/jjm5>, (accessed 30/07/2018).
- Takahashi, B. and Meisner, M., 2013. Climate change in Peruvian newspapers: the role of foreign voices in a context of vulnerability. *Public Understanding of Science*. 22(4): 427-442.
- Tannen, D., 1993. Introduction. In D. Tannen (ed.) *Framing in Discourse*. New York: Oxford University Press: 3-13.
- Tynkkynen, V.-P. and Tynkkynen, N., 2018. Climate denial revisited: (Re)contextualising Russian public discourse on climate change during Putin 2.0. *Europe-Asia Studies*. 70(7): 1103-1120.

Verzhbitskaya, N., 2002. “Ukroshchenie” metana, *Kazakhstanskaya Pravda*, 21/09/2002.

Weinthal, E. and Watters, K., 2010. Transnational environmental activism in Central Asia: the coupling of domestic law and international conventions. *Environmental Politics*. 19(5): 782-807.

Wilson, J., 2015. Understanding resource nationalism: economic dynamics and political institutions. *Contemporary Politics*. 21(4): 399-416.

World Bank, 2014. *Turn down the heat. Confronting the new climate normal*. World Bank Group, 98222, <http://documents.worldbank.org/curated/en/294131467991967756/pdf/98222-WP-P148173-PUBLIC-ADDSERIES-Turn-down-the-heat-doc-date-6-1-2015-Box393168B.pdf>, (accessed 04/02/2017).

Yun, S.-J. Ku, D., Park, N.-B. and Han, J., 2014. Framing climate change as an economic opportunity in South Korean newspapers. *Development and Society*. 43(2): 219–238.

ⁱ Where climate sceptic arguments are presented as equally widespread and/or important.

ⁱⁱ Similar to the previous studies of the official media in the post-Soviet countries (Rollberg and Laruelle 2015), our approach to data does not distinguish between opinion pieces, editorials, news reports.

ⁱⁱⁱ Our coding protocol is presented in the appendix in the Taylor and Francis website.

^{iv} An exception is the code which aimed to detect climate change’s beneficial consequences. In 88 out of 91 sampled articles the theme was not present (and coders agreed on this in 100% of cases). Hence, the agreement between the coders is high, but the variation in response categories is too low to estimate an intercoder reliability score that expects some heterogeneity in response categories.

^v This was mostly the case for the articles where climate change was not the main topic of discussion.

^{vi} The ‘Green bridge’ is a ‘partnership program’ which suggests international exchange of ‘green’ technologies and expertise as well as ‘financial support’ provided by developed countries to assist sustainable growth in developing countries (Ministry of Energy of the RK 2017).