Environmental leaders and pioneers: agents of change?

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Routledge
Taylor & Francis Group

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Duncan Liefferink[a] and Rüdiger K.W. Wurzel[b]

[a]Department of Environmental Policy Sciences, Institute for Management Research, Radboud University, Nijmegen, The Netherlands; [b]School of Politics, Philosophy and International Studies, University of Hull, United Kingdom

ABSTRACT
This article distinguishes between states acting as environmental *leaders* or *pioneers*. While leaders usually actively seek to attract followers, this is not normally the case for pioneers. Dependent on their internal and external ambitions, states may take on the *position* of a laggard, pioneer, pusher or symbolic leader. When doing so, states employ various combinations of *types* and *styles* of leadership or pioneership. Four *types* of leadership/pioneership – structural, entrepreneurial, cognitive and exemplary – and two *styles* of leadership/pioneership – transactional/humdrum and transformational/heroic – are used to assess leaders and pioneers. The novel analytical framework put forward is intended to generate greater conceptual clarity, which is urgently needed for more meaningful theory-guided cumulative empirical research on leaders and pioneers.

Introduction

Studies of comparative politics (CP) and international relations (IR) have seen a proliferation of analytical terms such as *leader*, *pioneer*, *pusher state*, *pioneer*, *first mover* and *pace setter* to describe putative agents of change in domestic and European Union (EU) policy-making and in international regime creation. The proliferation of competing analytical terms has led to analytical confusion, thus making difficult the emergence of theory-guided cumulative empirical research on the actions and impact of leaders and pioneers, which are widely perceived as important agents of change.

There has long been a wide use of the terms *leaders* and, though to a lesser degree, *pioneers* in CP and IR studies focusing on environmental issues including: (1) international environmental regimes in general (e.g., Underdal 1994; Young 1991) and climate change regimes in particular (e.g., Gupta and Grubb 2000; Schreurs and Tiberghien 2007; Wurzel and Connelly 2011);

(2) EU environmental policy (e.g., Andersen and Liefferink 1997; Héritier 1996; Jordan et al. 2010; Liefferink and Andersen 1998); and (3) national environmental policy capacity (e.g., Jänicke and Weidner 1997; Liefferink et al. 2009). If a relatively extensive literature already exists, why is it useful to arrive at an analytically more fine-grained and more robust conceptual framework for empirical research on (environmental) leaders and pioneers? Many studies have used the terms environmental *leaders* and *pioneers* (as well as related terms) interchangeably while failing to provide clear definitions. The lack of conceptual clarity comes at a price which can be seen, for example, in the inflationary use of the terms environmental pioneers and leaders (as well as related terms) for an ever wider range of actors (e.g., states, the EU, international organizations, cities, businesses, non-governmental organizations [NGOs] and individuals) and their wide-ranging leadership and/or pioneering activities (*cf*. Liefferink and Wurzel 2013).

The main aim of this article is to put forward a more clearly defined, differentiated analytical framework which is more robust in analytical terms and should thus encourage theory-guided cumulative empirical research on leaders and pioneers. We draw on new empirical findings from original research[1] and the existing primary and secondary literature. The conceptual framework developed in this article does not assume *ex ante* that particular states will show a clear preference for certain positions, types and styles. Instead, we argue that there is a need to establish empirically whether national preferences exist or whether states adopt different positions, types and styles depending on the sub-sector or even issue at stake. We will demonstrate the relevance of our analytical framework for theory-guided cumulative research with reference to existing studies and new empirical findings. Nevertheless, our proposed analytical framework will need to be 'tested' by additional future research.

This article will focus on states which have traditionally been at the centre of the environmental leaders and pioneers literature. It analyses the different *positions* that leaders and pioneers may adopt while investigating which *types* and *styles* of leadership they may employ to articulate those positions on the domestic, EU and international levels. However, we first clarify the analytical meaning of the terms leaders and pioneers.

Helms (2012: 2) has noted that 'leadership is a notoriously elusive and contested concept', while Young (1991: 281) has pointed out that leadership is 'a complex phenomenon, ill-defined, poorly understood, and subject to recurrent controversy'. Almost the same could be said about pioneers. The *Oxford English Dictionary* (2015) defines a *leader* as someone 'who conducts, precedes as a guide, leads a person by the hand or an animal by a cord, etc.', and a *pioneer* as '[a] member of an infantry group going with or ahead of an army or regiment to dig trenches, repair roads, and clear terrain in readiness for the main body of troops'. In other words, a *pioneer* is ahead of the

troops or the pack. Pioneers carry out activities which, depending on the subsequent circumstances and events 'in the field', may or may not help others to follow. A *leader,* on the other hand, has the explicit aim of leading others, and, if necessary, to push others into a follower position. Therefore, leaders usually attract followers, or at least aim to do so (e.g., Burns 1978, 2003; Helms 2012), while this is not necessarily the case for pioneers. Owing to space constraints, our article neither focuses on the interrelations between leaders and followers nor does it assess how leaders and pioneers are perceived by third states. Instead, it aims to provide an analytically more meaningful classification of environmental leadership and pioneering activities ('pioneership' for short). We argue that although in theory the same *types* and *styles* of leadership/pioneership are available for *both* leaders and pioneers, in practice leaders and pioneers will normally exhibit preferences for different combinations of *types* and *styles* of leadership.

Nye (2008: 27) has argued that '[y]ou cannot lead if you do not have power. … Those with more power in a relationship are better placed to make and resist change,' while Burns (1978: 12) has claimed that '[t]o understand the nature of leadership requires understanding of the essence of power, for leadership is a special form of power'. Clearly, power does play an important role for leadership. However, most of the CP and IR literature agrees that although 'leadership has something to do with power … it is not synonymous with power' (Helms 2012: 3; see also Nye 2008; Young 1991). For Burns (1978: 19) 'All leaders are actual or potential power holders, but not all power holders are leaders.' The literature on environmental pioneers, on the other hand, rarely focuses on issues of power (e.g., Andersen and Liefferink 1997; Liefferink and Andersen 1998). At first sight it may therefore appear that a leader has some form of power, while this is not the case for a pioneer. However, in this article we argue that *both* leaders and pioneers usually possess some form of power, although the types of power which they can acquire and the resulting *types* of leadership and pioneership usually differ for leaders and pioneers. By also making use of the *styles* concept, we distinguish analytically between transactional or humdrum activities and transformational or heroic actions by leaders and pioneers, but also introduce a temporal dimension which is missing from much of the environmental leader and pioneer literature.

Ambitions and positions of environmental pioneers and leaders

A leader state has the explicit ambition to lead others, while a pioneer state's priority is to develop its own pioneering activities without paying (much) attention to attracting followers. Arguably, the main reason for this is that leader and pioneer states foster their *internal* and *external* ambitions to different degrees. The observation that leaders and pioneers, like the Roman god

Table 1. Ambitions and positions of environmental leaders and pioneers.

	Internal 'face'	
External 'face'	Low internal environmental ambitions	High internal environmental ambitions
Low external environmental ambitions	(a) Laggard	(b) Pioneer
High external environmental ambitions	(c) Symbolic leader	(d) Pusher

Janus, may have divergent 'faces' (Liefferink et al. 2009) provides the starting point for a more systematic distinction between different types of leaders and pioneers which we develop in this article.

Von Prittwitz (1984) differentiates between states' *domestic* (or internal) and *foreign* (or external) environmental policies. Although this differentiation is contestable, it is relatively widely accepted in the literature. Categorizing a state's internal and external ambitions as low or high allows us to arrive at a characterization of the underlying *positions* of leaders and pioneers as set out in Table 1.[2]

Table 1 distinguishes the following four *positions*:

(a) Low internal and low external ambitions do not allow a state to become a leader or pioneer. Instead such actors are classified as *laggards* (or, at best, latecomers).

(b) High internal and low external ambitions lead to a *pioneer* position. A typical pioneer is ahead of others, but does not care about followers. In fact, a genuine pioneer may feel constrained by slower partners and/or followers, and thus try to 'go it alone' by opting out of common EU policies and/or international treaties which could stifle its high domestic ambitions. A pioneer may nevertheless attract followers which may emulate its actions (Holzinger and Knill 2008), although this usually constitutes an unintentional external consequence of the pioneer's internal actions.

(c) Low internal and high external ambitions turn states into a *symbolic leader* which usually displays little more than window-dressing or 'cost-free leadership' (Liefferink and Birkel 2011).

(d) A combination of high internal and high external ambitions turns an actor into a *pusher* which takes the lead domestically and actively seeks to push other states to follow its example. We further differentiate between a constructive pusher and a conditional pusher, which *both* have high internal and external ambitions. However, while a constructive pusher intentionally sets a good example which it wants others to follow (in contrast to a pioneer which does so unintentionally), a conditional pusher will adopt policy measures to implement its internal ambitions only if other states

adopt similar measures. For a constructive pusher, environmental ambitions override economic concerns, while for a conditional pusher (for which the economic level playing field argument is central) it is the other way round.

Three related conceptual issues have to be clarified before we can explore further how leaders and pioneers use different types and styles of leadership/pioneership.

First, distinguishing *high* from *low* environmental ambitions may at first sight appear straight forward. In practice, however, what is beneficial for the environment is often contested (Knill et al. 2012; Weidner et al. 2011). For example, biofuels were initially used to reduce fossil fuel consumption which contributes towards climate change. Nowadays„ however, biofuels are increasingly perceived as leading to an irresponsible use of scarce arable land. Another example constitutes nuclear energy, which France tried to promote on the EU level as a 'renewable energy' in the fight against climate change, while others have criticized this energy source as unsafe, expensive and non-renewable (Interview, EU official, 2013). Clearly, there is a normative dimension involved in defining what constitutes an environmental leader and pioneer. This has been emphasized also in the general leadership literature by both CP scholars (e.g., Burns 1978; Helms 2012) and IR researchers (e.g., Young 1991).

Second, environmental ambitions may change over time. Over the years leaders and pioneers come and go. The United States (US) and Japan acted as environmental leaders in the 1970s and 1980s respectively, but have rarely done so since (Jänicke 2005). The environmental pioneer positions of the EU's initial 'green trio' – Denmark, Germany and the Netherlands – became clearly discernible only from the 1980s onwards (Liefferink et al. 2009). However, since the 2010s, at least on climate change, the Netherlands has provided little more than 'cost-free leadership' (Liefferink and Birkel 2011) or even abdicated as a leader (Interview, EU official, 2013). Semi-permanent coalitions of environmental leaders across a wide range of environmental issues do not exist on the EU level. Instead 'they have to be formed on an issue-by-issue basis and remain liable to defection' (Liefferink and Andersen 1998: 262). However, even without formal co-ordination and despite frequent defections on particular issues, environmental leaders nevertheless often end up pushing for similar goals.

Importantly, depending on the issue at stake, states may decide to act as leaders or pioneers only in certain phases (e.g., agenda-setting) of the EU policy-making process and/or the international regime creation process. The main reasons for this are usually shifts in domestic preferences and the changing dynamics in the EU and/or international context (Weidner et al. 2011).

For example, the 2008 financial crises has made many environmental leader/pioneer states less ambitious and more cost-conscious.

Denmark offers a good example of small states being able to provide leadership in particular phases of the highly institutionalized EU policy-making process. Considering its small size, Denmark has limited power to act as a leader in the decision-taking phase of the EU policy-making process (especially under qualified majority voting for which member states' votes are weighted according to their population sizes) or in international negotiations. In the early, more informal phases of the EU policy-making process or the international regime creation process, Denmark can, however, articulate its external environmental ambitions more effectively. Denmark owes much of its environmental leader reputation within the EU to its efforts in shaping the EU's environmental policy agenda (Liefferink and Andersen 1998; Interview, Danish official, 2011). A large member state like Germany, in contrast, is in a better position to exert leadership throughout all decision-making phases (Interviews, EU and German officials, 2013–2014)[3]. As will be explained below, these differences in timing can be linked to the extent to which different types of leadership can be exerted by states in different phases of the EU policy-making and international regime creation processes. Importantly, the (sixth-monthly) rotating Council Presidency allows all member states (including small member states) to exert considerable influence at the helm of the EU (e.g., Wurzel 1996). There is no equivalent institutional mechanism at the international level.

Third, a state may qualify as environmental leader or pioneer either by being the *first* to propagate or introduce a certain environmental policy innovation or by exhibiting the *highest* level of ambition (e.g., strictest standard). These two features may be combined. For instance, it is possible that a state is first in introducing a carbon tax, while follower states adopt higher carbon taxes and/or more comprehensive ecological tax reforms. As Burns (2003: 26) has put it (while discussing a different political issue): 'Followers might outstrip leaders. They might become leaders themselves.' Both 'the first in class' and 'the best in class' can in principle be viewed as leaders or pioneers, although the motivations underlying their differing ambitions and the subsequent consequences may be different.

Positions and types of environmental leadership

A wide range of definitions of different *types* of leadership exists in the literature. For example, Young (1991) differentiates between structural, entrepreneurial and intellectual leadership, while Underdal (1994) identifies coercive, instrumental and unilateral leadership. Grubb and Gupta (2000) distinguish between structural, instrumental and directional leadership. In this article, we follow Wurzel and Connelly's (2011) typology, which builds especially on

Young (1991) by distinguishing between structural, entrepreneurial and cognitive leadership types. However, we add exemplary leadership as a fourth leadership type.

First, *structural* leadership relates to an actor's hard power (Nye 2008) and depends on material resources such as military power and economic strength. Apart from ecological security conflicts about scarce resources (e.g., water), the relevance of military power tends to be low for environmental problem-solving. For example, climate change could not be prevented or mitigated by even the world's most powerful state(s) through military power alone. For most environmental issues, structural power relies usually primarily on economic power. This may involve granting access for imports to domestic markets or the Single European Market only if such products comply with environmental standards.

Structural leadership (or the lack of it) may be related also to a state's contribution to a particular environmental problem. For example, the fact that China now accounts for roughly one-quarter of the world's carbon dioxide emissions gives it considerable leverage (i.e., structural power).

Second, *entrepreneurial* leadership involves diplomatic, negotiating and bargaining skills in facilitating compromise solutions and agreements. Young (1991: 293) identifies as crucial for entrepreneurial leaders the 'negotiating skills to frame issues in ways that foster integrative bargaining'. In other words, being able to design complex package deals which offer benefits to all parties involved is an important entrepreneurial leadership skill. However, we do not count as entrepreneurial leadership actions which water down or prevent environmental agreements. As explained above, environmental leadership/pioneership involves a normative dimension which requires the leader/pioneer to facilitate rather than to veto ambitious environmental measures which help to solve collective action problems.

Third, *cognitive* leadership involves defining or redefining of interests through ideas, as embodied in concepts such as sustainable development (which assumes that economic, social and environmental concerns should be given equal weight) and ecological modernization (which propagates that ambitious environmental measures are beneficial for both the environment *and* economy). Cognitive leadership may entail scientific expertise on the causes and effects of and possible solutions to environmental problems, but also 'experiential' knowledge 'about how policies actually work at the street level or company level, and how implementation problems can be solved effectively' (Haverland and Liefferink 2012: 184). Moreover, cognitive leadership may also include what Dyson (2014: 5) has called 'arguing power', which stems from the 'capacity to frame how policy issues … are debated' and allows actors 'to set the normative standards of policy evaluation'.

The timing and sequencing of different types of leadership is crucial because cognitive leadership operates on a different timescale to structural

and entrepreneurial leadership. Cognitive leadership (in Young's terminology intellectual leadership)

> is a deliberative … process; it is difficult to articulate coherent systems of thought in the midst of the fast-paced negotiations associated with institutional bargaining. It is also in part due to the fact that new ideas generally have to triumph over the entrenched mindsets or worldviews held by policymakers, so that the process of injecting new intellectual capital into policy streams is generally a time-consuming one. (Young 1991: 298)

We can now link the different *types* of leadership/pioneership with the *positions* of leaders and pioneers identified in Table 1. In doing so, we focus on the different types of leadership/pioneership which both leaders and pioneers use *externally vis-a-vis* other states, the EU and international organizations. As neither pioneers nor laggards aspire to play an active external role, in theory they do not need to exhibit external leadership. However, a pioneer may unintentionally assume an external role by setting an example for others.

In empirical terms the most straightforward case is that of a *pusher* which, driven by its high internal ambitions, articulates its position externally with the help of *structural leadership*. Germany pushing for the 'clean car' in the 1980s constitutes a classic example. Germany, which hosts both Europe's largest domestic car industry and the EU's largest domestic car market, used its structural powers to get other member states (and the European Parliament) to agree to EU legislation which brought about the introduction of the three-way catalytic converter and unleaded petrol against initial fierce opposition from France, Italy and the United Kingdom (UK; Wurzel [2002]). In terms of both car production and emissions, Germany was therefore systemically the most significant member state. Importantly, *entrepreneurial* leadership (e.g., diplomatic skills) and *cognitive* leadership (e.g., technical expertise) came into play as well, although it is safe to assume that a member state with similar environmental ambitions but fewer structural leadership powers (e.g., Denmark) would not have achieved the same outcome or only within a much longer timeframe.

Even an actor with low environmental ambitions may use *structural* leadership, thus turning it into a *symbolic leader*. For example, the US successfully pushed for the inclusion of emissions trading as a novel policy instrument to reduce more cost-effectively greenhouse gas emissions (GHGE) under the 1997 Kyoto Protocol. The US's preferred policy instrument was opposed by the EU and its member states, which, however, proposed significantly higher GHGE reduction targets. Ironically, the US later failed to ratify the Kyoto Protocol, thus arguably becoming a climate change laggard, although it had managed to 'upload' to the international level its favoured policy instrument (Jordan et al. 2010; Wurzel and Connelly 2011).

States may, however, pursue both high internal and external ambitions – and thus act as *pushers* – without being able to offer much in terms of

structural leadership. In the absence of significant *structural* leadership, such states arguably translate their ambitions into external positions primarily with the help of a combination of *entrepreneurial* and *cognitive* leadership. A case in point is Denmark. Considering it is a small member state, Denmark has managed to have a disproportionally large impact on EU environmental policy (Liefferink and Andersen 1998). Although it is theoretically possible for states to adopt a pusher position which relies on *either* entrepreneurial *or* cognitive leadership, it is likely that both will be combined. The main reason for this is that scientific expertise and experiential knowledge (i. e., cognitive power) without well-targeted and well-timed diplomatic efforts (i. e., entrepreneurial power) usually fail to convince policy makers from other states, the EU or international organizations (Haverland and Liefferink 2012). Or as Nye (2008: 9) has put it: 'generating influential ideas is not the same as mobilising people for action'.

Importantly, combined *entrepreneurial* and *cognitive* leadership may also be used in the absence of high internal ambitions, thus leading to *symbolic leadership*. A good example constitute the negotiations on the EU's 'burden-sharing agreement' which allocated differentiated GHGE reduction targets to member states on the basis of the EU's collective (8%) Kyoto Protocol target. In the EU negotiations, the Netherlands acted as a knowledge broker by skilfully propagating a complex compromise proposal in the form of the 'triptych approach'. It did so, however, in the conspicuous absence of domestic environmental ambition (Liefferink and Birkel 2011: 157–8).

If states have in place the necessary capacity for structural leadership, then they can usually mobilize it instantly. The same applies to entrepreneurial leadership, provided that sufficient, competent diplomatic staff are available. However, a different timescale usually applies to cognitive leadership. It usually takes time for new 'intellectual capital' (Young 1991: 298) to gain acceptance by third states, the EU and international organizations. Moreover, scientific expertise and experiential knowledge is usually generated on the domestic level only over a longer time period. This is relevant in particular for pushers without significant structural leadership capacity (e.g., small states). If such states want their external ambitions to succeed, then they will have to rely on a combination of entrepreneurial and cognitive leadership. The required expertise can only be made available externally at the appropriate moment if well-developed domestic capacities (e.g., knowledge infrastructure) are already in place (Haverland and Liefferink 2012). Importantly, such expertise is in high demand, in particular in the agenda-setting and early policy formulation phases, whereas structural leadership plays a key role in the subsequent adoption phase (Naurin and Wallace 2010). This explains why pushers without significant structural leadership capacities (e.g., small states) may nevertheless become influential in the early phases of the EU policy-making and/or the international regime creation processes.

So far we have focused on pushers which are actors that explicitly aspire to lead others (i.e., to attract followers). But actors without high external ambitions may also have an impact on other states, the EU or international regimes. This applies in particular to *pioneers*. Being 'ahead of the pack', pioneers' activities may be followed by other states through, for example, lesson-drawing, emulation, diffusion and policy transfer (e.g., Holzinger and Knill 2008). In such cases, structural, entrepreneurial or cognitive types of pioneership are unnecessary. This leads us to identify a fourth type of leadership/pioneership, which is 'leadership or pioneership by example' or *exemplary* leadership/pioneership.

Conceptually, *exemplary* leadership/pioneership comes close to *directional* leadership as defined by Grubb and Gupta (2000), although the two concepts are not identical. Directional leadership assumes an *intention* to set an example to follow. It therefore does not apply to pioneers. In other words, a directional leader wants to lead others by attracting followers. In this article, directional leadership therefore corresponds to a constructive *pusher* position. Constructive pushers (i.e., states with both high internal and external ambitions) may adopt domestic policy measures which are aimed at acting as examples for others. This argument is in line with Nye (2004: 5, as cited in Masciulli *et al.* 2009: 461) who argues: 'Leadership … is not just about issuing commands … but also involves leading by example and attracting others to do what you want … Having others to buy into your values.' Often, constructive pushers actively use experiential knowledge gained at the domestic level in their efforts to convince others of the feasibility of their preferred external policy solutions.

In contrast, exemplary leadership/pioneership as defined in our article can *also* be exerted *unintentionally* as happens in the case of *pioneers*. An ideal-typical pioneer has no external ambitions. It is not interested in attracting followers, does not provide external leadership and fails to exert any other externally directed types of leadership. If a pioneer's domestic policy innovations nevertheless serve as examples for other states, the EU or international regimes, then they do so as an unintended consequence. Sweden's ambitious chemicals policy offers a good example. Though initially developed solely for domestic reasons, it soon became a model for the EU's European Registration, Evaluation and Authorization of Chemicals (REACH) Regulation (Liefferink and Andersen, 1998).[4] Exemplary leadership as defined in this article thus refers to both *intentional* example-setting by constructive pushers (i.e., directional leadership in Grubb and Gupta's terminology) and *unintentional* example-setting by pioneers.

Table 2 links the different *positions* of leaders and pioneers to different *types* of leadership/pioneership. A *laggard* has neither internal nor external ambitions and therefore does not exhibit leadership. However – and although this article does not seek to assess the interrelations between leaders and

Table 2. Types of leadership used by leaders and pioneers in different positions.

Position		Type of leadership			
		Structural	Entrepreneurial	Cognitive	Exemplary
Laggard		–	–	–	–
Pioneer		–	–	–	x
Pusher	either	x	(x)	(x)	(x)[a]
	or	(x)	x	x	(x)[a]
Symbolic leader	either	x	(x)	(x)	(x)
	or	(x)	x	x	–

Notes: 'x' denotes 'essential'; '(x)' denotes 'possible, but not essential'; '–' denotes 'not relevant'.
[a]Exemplary power is relevant for constructive but not for conditional pushers.

followers – it is important to remember that laggards are potential followers. Therefore, laggards are important addressees for the actions of leaders. A *pioneer* has no significant external ambitions, although it may nevertheless exert external impact through exemplary leadership. For *pushers* and *symbolic leaders,* there are two principle options. First, they can try to lead others by using structural leadership (e.g., economic power). In doing so, they may supplement their structural leadership with entrepreneurial leadership (e.g., negotiating skills) and cognitive leadership (e.g., scientific expertise). Second, if structural leadership capacities are limited, leader states are likely to rely on a combination of entrepreneurial and cognitive leadership. In addition, a constructive pusher can utilize exemplary leadership, which is less relevant for a conditional pusher because the latter makes its internal policies conditional upon other states adopting similar policies. Exemplary leadership will usually be combined with cognitive leadership (e.g., experiential knowledge). It is normally not relevant for a symbolic leader which, by definition, does not have in place actual internal policies when propagating high environmental ambitions externally. However, as will be explained below, under certain circumstances, symbolic leaders may actually be 'forced' (e.g., by the EU) to adopt internal policies that will reduce the credibility gap which normally opens up between a symbolic leader's ambitious rhetoric and its lack of actual policies.

Styles of leadership

Having identified and explained four different *types* of leadership/pioneership – structural, entrepreneurial, cognitive and exemplary– which leaders and pioneers may exhibit, we can now introduce different *styles* of leadership/pioneership that both leaders *and* pioneers can utilize when trying to achieve their external (environmental) ambitions. Adding a *style* dimension has three major analytical advantages. First, it allows us to develop a more fine-grained analysis of *how* (e.g., in a humdrum or heroic manner) leaders and pioneers try to achieve their external ambitions. Second, it enables us to

introduce a *time dimension* (e.g., short or long term) for external activities of leaders and pioneers. Third, it helps to provide a more comprehensive explanation for the actual *impact* in terms of incremental or 'revolutionary' change on the EU and/or international level. Leaders' external ambitions may, however, fail to result in tangible impact, in which case they lead to inertia rather than change.

We use a conceptual differentiation of leadership/pioneership styles which draws on Hayward (1975, 2008), who has usefully distinguished *humdrum* from *heroic* leadership, and Burns (1978, 2003) who has helpfully differentiated between *transactional* and *transformational* leadership.[5] We argue that although transactional and humdrum styles as well as transformational and heroic styles are very closely related, subtle differences exist (Wurzel and Connelly 2011). Arguably, the differentiation between humdrum and heroic aims to focus more strongly on *how* leaders and pioneers use leadership/pioneership without ignoring their impact (or the lack of it), while the distinction between transactional and transformational focuses more strongly on the actual *impact* of leadership/pioneership activities without ignoring how actors use leadership/pioneership.

Following Lindblom's (1959) concept of muddling through, Hayward (2008: 6) defined a humdrum leadership style as one which 'does not have an explicit, overriding, long-term objective and action is incremental, departing only slightly from existing policies as circumstances require'. Change instigated by a humdrum style therefore takes the form of marginal adjustments. In contrast, a heroic style 'sets explicit long-term objectives to be pursued by maximum co-ordination of public policies and by an ambitious assertion of political will' (Hayward 2008: 7). Heroic leadership can usually be offered only infrequently and/or in exceptional circumstances. Importantly, for Hayward a heroic leadership style is heroic 'in the dual sense that it would be both an ambitious political exercise in rational decision-making and an ambitious assertion of political will by government leaders' (Hayward 1975: 5).

For Burns (2003: 375), *transactional* leadership is aimed at achieving 'short-term expedient goals rather than long-term political strategy'. It amounts to reactive leadership which adjusts to external circumstances (Burns 2003: 5). In contrast, *transformational* leadership aims to bring about profound or even revolutionary change. According to Burns (2003: 24) transformational leadership 'is to cause a metamorphosis in form or structure, a change in the very condition or nature of a thing … a radical change'. Transformational leadership/pioneership requires an active or proactive decisional style which pursues long term objectives. Importantly, transactional and transformational styles should be perceived as part of a continuum. Although transactional leadership usually fosters only incremental piecemeal changes '[c]ontinual transaction over a long period of time can produce transformation' (Burns 2003: 25). Streeck and Thelen (2005) have similarly argued that continuous

incremental (institutional) change can eventually result in transformational (institutional) change.

Because no exact measurement scales exist for differentiating empirically between a transactional and a transformational style, it can be challenging to do so. However, it is relatively easy to find empirical examples of both styles. A good example of a transformational style constitutes Germany's energy transition (*Energiewende*) which aims to bring about the rapid full-scale transformation of fossil-fuel-based energy by renewable energy sources. Germany arguably adopted a transformational style, the reliance on which became more urgent with the decision to phase out the domestic use of nuclear power by 2022. Fairly radical change is required to bring about the planned energy transition which one German Environment Agency (*Umweltbundesamt* [UBA]) official described as a 'grand social experiment' (Interview, 2014). Importantly, while adopting a domestic energy transformation, Germany also lobbied hard externally for ambitious EU renewable energy and energy efficiency targets while being the main driver behind the International Renewable Energy Agency (IRENA) (Interview, German and EU officials, 2013–2014). In this case Germany therefore showed transformational *pioneership* on the domestic level and transformational *leadership* on the international level. Both in the above-mentioned car emission and in the energy transformation case, Germany exhibited high internal *and* external ambitions. However, only in the renewable energy case did Germany adopt a transformational style (i.e., a radical and rapid change), while the introduction of the three-way catalytic converter and unleaded petrol was achieved by a transactional style which triggered the adoption of an end-of-pipe technology.

Above, we have argued that structural and, though to a lesser degree, entrepreneurial leadership/pioneership can usually be activated more or less instantly. However, for cognitive leadership to succeed, states will have to display both proactive efforts and staying power over a considerable time; short bouts of leadership, even if carried out in proactive fashion, will not suffice for goal attainment which requires cognitive leadership. Occasionally promoting ecological modernization at only one or a few EU and/or international summits or in only one of the multi-layered EU negotiating settings (e.g., the Council and its working groups) is unlikely to succeed.

In Figure 1 we have combined the four main positions – laggard, pioneer, pusher and symbolic leader – which states can adopt with the different styles.
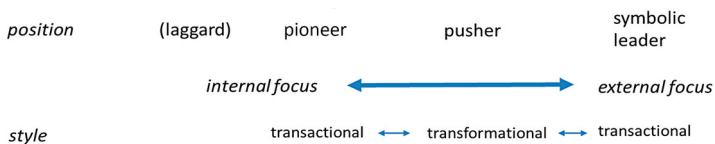

Figure 1. Positions and styles of environmental leaders and pioneers.

Figure 1 illustrates that laggards have no environmental ambitions, while pioneers usually exhibit high internal and low external ambitions. A (constructive and conditional) pusher, on the other hand, combines high internal with high external environmental ambitions. Finally, a symbolic leader normally combines high external with low internal ambitions.

We argue that, in principle, all four *types* of leadership/pioneership – structural, entrepreneurial, cognitive and exemplary – can be used in combination with either a humdrum/transactional or with a heroic/transformational leadership/pioneership style. Leaving aside laggards, this implies that both *styles* are in principle relevant for all four leader/pioneer *positions*. However, a pioneer with low or no external ambitions which relies mainly on exemplary leadership is unlikely to adopt a heroic/transformational style externally. Similarly, a symbolic leader will have difficulties in acting as a credible heroic/transformational leader in the longer term (but see below). Importantly, constructive and conditional pushers, which combine high internal and high external ambitions, are most likely to exert credible heroic/transformational leadership/pioneership.

In the 1990s the EU's 'green trio' arguably adopted a heroic leadership style in EU and international climate change politics when demanding fairly ambitious GHGE reduction targets, although, at the time, these targets were largely symbolic as they had not (yet) been backed up by domestic or EU policies (Wurzel and Connelly 2011). In other words these three member states exhibited heroic leadership externally while relying at best on a humdrum style domestically, thus acting as symbolic leaders. However, as Jänicke (2011: 142) has observed in Germany's case, a symbolic leader which adopts a heroic leadership style may find itself caught by a 'kind of "enforced leadership"' through EU institutions (e.g., the Commission) and, although to a lesser degree, international organizations. Symbolic leaders may thus be 'forced' to live up to their external ambitions by closing the 'credibility gap' which may have opened up between external ambitions and the lack of corresponding internal policies (Wurzel and Connelly 2011). The external positioning of a symbolic leader may therefore, at least under certain circumstances, lead to domestic policy (implementation) measures through a 'multi-level reinforcement' mechanism (Jänicke 2014). Schreurs and Tiberghien (2007: 25) have pushed this argument further when stating that 'multi-level governance has not just multiple veto points, it has created numerous leadership points where competitive leadership has been initiated'. This could help to explain why EU and international climate change negotiations have not ground to a halt despite the existence of multiple veto actors.

Conclusion

Having developed a more nuanced and analytically more robust conceptualization of leaders and pioneers than can be found in the existing literature, we

return to the question of why this exercise should be relevant or interesting to other researchers. In other words, we aim to address the 'So what?' question. We offer four main reasons for why the conceptual classifications developed in this article ought to be of interest to other researchers. First, as pointed out above, there has been a proliferation of analytical terms such as *leader*, *pioneer*, *first mover*, etc. to describe putative agents of change in national, EU and international environmental politics. More theory-guided cumulative empirical research is needed to explain better the actions and impact of leaders and pioneers, which are widely perceived by both social scientists and practitioners as important agents of change. Our analytical leadership/ pioneership classification aims to facilitate such research. It should render unnecessary the reinvention of the wheel in analytical terms when analysing (environmental) leaders and pioneers (for a first attempt at applying the framework, see Wurzel *et al.* 2016).

Second, although (owing to space constraints) this article has focused only on states, it is becoming increasingly clear that non-state actors may also play an important role as putative agents of change or, in other words, leaders and pioneers. Under the analytical banner of polycentric governance, studies on environmental leaders and pioneers have increasingly focused also on non-state actors (*cf.* Jordan and Huitema 2014). This analytical trend has accelerated since the 2008 financial crises, partly because some environmental leader and pioneer states have become more cost-conscious while toning down (some of) their environmental ambitions. Such a development makes even more important the existence of a highly differentiated but analytically robust conceptual framework which could help to foster theory-guided cumulative research on a range of actors by both CP and IR scholars. The analytical framework for states which we have developed in this article may also provide a starting point for investigating leadership/pioneership by non-state actors, although modifications are likely to be required.

Third, simply classifying a state (or non-state actor) as a leader or pioneer is a fairly blunt analytical assessment. As this article has shown, it usually tells us little about the actors' motivations and positions, which may differ considerably. For example, there is a significant difference between the motivations and strategies of constructive pushers, which will take the lead regardless of whether others follow, and conditional pushers which will adopt costly environmental measures only if others adopt the same or similar measures. In other words, there may be differences between internal and external ambitions which matter both in analytical and practical terms. In an increasingly interdependent world the motivations and actions of pioneers (which want as much autonomy as possible for progressive domestic environmental actions) may seem anachronistic. However, environmental policy research has shown that pioneers which experiment with novel tools, approaches,

institutional arrangements, etc. are crucial for the development and spread of environmental innovations (e.g., Jänicke 2005).

Fourth, the introduction of a style dimension into the research on leaders and pioneers helps to explain better both temporal changes (e.g., short-long term leadership/pioneership) by leaders and pioneers and the degree of change (e.g., transactional–transformational) which leaders and pioneers try to achieve. In other words, it focuses researchers' attention on the possibility that internal and/or external ambitions of (former) leaders and pioneers may change over time. The existing literature on leaders and pioneers says little about the importance of the time dimension and degree of change.

Readers will need to decide whether our novel conceptual framework is a step in the right direction for the development of theory-guided cumulative research on leaders and pioneers, which are widely acknowledged as important actors of change. Clearly, additional research is needed to 'test' whether our conceptual framework adds analytical value in terms of allowing for a more fine-grained but also more robust assessment for theory-guided empirical research on leaders and pioneers in environmental governance, and perhaps also in other areas of governance.

Notes

1. It draws on 15 interviews with British, Danish, Dutch, German and EU policy makers in the period 2011–2014.
2. Table 1 draws on Liefferink and Andersen (1998).
3. Especially in federal states (e.g., Germany and the United States) a considerable degree of autonomy exists for subnational governments on environmental issues.
4. Later Sweden developed from a pioneer into a pusher which actively promoted its domestic chemicals policy during EU accession negotiations.
5. Neither Hayward (1975, 2008) nor Burns (1978, 2003) differentiate leadership from pioneership. References to these scholars therefore use only the term leadership.

Acknowledgements

Disclosure statement

Funding

Notes on contributors

Duncan Liefferink is assistant professor in the Department of Environmental Policy Sciences, Institute for Management Research, Radboud University Nijmegen, The Netherlands.

Rüdiger K.W. Wurzel is professor of comparative European politics and Jean Monnet Chair in European Union Studies in the School of Politics, Philosophy and International Studies, University of Hull, United Kingdom.

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