

RESEARCH ARTICLE

A conflict of visions: Ideas shaping wildlife trade policy toward African megafauna

Michael 't Sas-Rolfes¹  | Jennifer Gooden^{1,2}

¹School of Geography and the Environment, University of Oxford, Oxford, UK

²Biophilia Foundation, Chester, Maryland, USA

Correspondence

Michael 't Sas-Rolfes

Email: michael.tsas-rolfes@biology.ox.ac.uk; tsas.rolfes@gmail.com**Funding information**

Earthmind

Handling Editor: Sarah Crowley

Abstract

1. Among factors that threaten wild populations of African megafauna, wildlife trade has gained prominence as a global policy issue, with concerted international campaigns aiming to influence the trade of species such as elephants, rhinos and lions. Trade policy is strongly contested, confounding attempts to develop coherent approaches across jurisdictions and through international mechanisms such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This undermines conservation efforts. Understanding the drivers of such conflict may help to address this problem.
2. Scholars of political science increasingly recognise the power of ideas as drivers within policy processes. Guided by this literature, we developed an analytical framework and conducted a thematic analysis to examine the ideas driving wildlife trade policy conflict. Our nested case study approach examined debates over trade policy toward African elephants, rhinos and lions at two levels: the international policy arena of CITES and within a single country, South Africa. Informed by earlier literature, we tracked the evolution of international trade policy debates over a 4-year period (2016–2019) and analysed submissions to a national policy review process in South Africa that took place during 2020.
3. During the study period, state and non-state actors contributed to vigorous trade policy debates within seven key thematic issues across the case study species. Arguments were driven by both cognitive ideas, which specify cause-and-effect relationships, and normative ideas, which are values-based and especially salient elements of anti-trade stances.
4. Fusing these cognitive and normative ideational elements, we identified three distinct overarching narratives relating to wildlife trade policy. These three narratives align with broader environmental policy and political narratives and elucidate inherent tensions within the CITES arena. They also reveal differing ethical interpretations and perceptions of risk and precaution.
5. *Policy implications.* Wildlife trade policy conflict is driven at least in part by competing ideological visions, which may be entrenched by the CITES Appendix

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2024 The Author(s). *People and Nature* published by John Wiley & Sons Ltd on behalf of British Ecological Society.

listing system. The structural role of CITES in perpetuating this polarisation—and the consequences thereof—warrants further research.

KEYWORDS

CITES, conservation, elephant, environmental governance, ethics, institutions, lion, rhino

1 | INTRODUCTION

Wildlife trade policy toward charismatic megafauna is a strongly contested issue, with opposing positions influenced by underlying ideas and ideologies. We undertook a 5-year research project to identify key ideational elements that underpin the conflict over trade policy decisions relating to selected African species. In this paper, after contextualising this issue, we elucidate our analytical approach, share our results and discuss their implications for addressing policy conflict for the benefit of conservation.

With biodiversity loss a pressing global concern (IPBES, 2019), conservationists have highlighted persistent threats to the world's populations of wild terrestrial mammalian megafauna (Ripple et al., 2016). Whereas overexploitation and habitat loss have long been recognised as principal drivers of wild species depletion, the role of wildlife trade has gained prominence over recent decades, with sustainability and legitimacy as two core issues ('t Sas-Rolfes et al., 2019). Although originally focussed on species conservation impacts, concerns over trade in wild animals and their body parts have more recently extended to include animal welfare aspects (Bowman, 1998; Baker et al., 2013) and zoonotic disease risk (Karesh et al., 2005; Smith et al., 2009). In the wake of COVID-19, these concerns have intensified, accompanied by calls for increased global regulation and even complete bans on wildlife trade (D'Cruze et al., 2020; Roe & Lee, 2021).

The concept of regulating wildlife trade to reduce the risk of species extinctions was firmly established by transatlantic initiatives at the start of the 20th century (Sand, 1997). An approach centred around listing threatened species and attempting to restrict or regulate their trade developed gradually during that century, with the US Endangered Species Act of 1973 co-evolving with and strongly influencing the simultaneous founding of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Epstein, 2006). Since 2014, the political profile of wildlife trade has been raised further through a series of international conferences initiated by the UK royal family and government (Milner-Gulland, 2018) and a simultaneous drive by the US government to link wildlife trafficking to national and global security concerns (Massé & Margulies, 2020).

With a mandate to protect wild species from overexploitation for international commerce, CITES currently shapes the global governance of wildlife trade: 183 nations have signed the treaty and various non-state actors play prominent roles. Throughout the evolution of this governance mechanism, African and Asian megafauna have provided a central focus for policymakers and

civil society. However, both the appropriate role and conservation impact of trade regulation relating to these species is contested, with some actors consistently advocating total bans on commercial trade (aligned with CITES Appendix I listings) and others preferring regulation aimed at ensuring that trade is linked to sustainable rates of extraction from the wild (aligned with CITES Appendix II listings). This trade policy conflict has been especially salient since the 7th CITES Conference of the Parties (CoP7) in 1989, at which a worldwide ban on elephant ivory trade was proposed but fiercely contested. Although a majority of Parties to the Convention voted to up-list the African elephant to Appendix I at that meeting, a complete and permanent worldwide ban was never implemented and conflict over ivory trade policy has persisted ever since (Gaffney & Evensen, 2019; Somerville, 2017), prompting scholarship to analyse this and related emerging debates (Favre, 1993).

The subsequent co-evolution of CITES and the wildlife trade policy debate is frequently discussed in the legal literature (e.g. Bowman, 2013; Goho, 2001; Kriepps, 1996; Sand, 1997) and to a lesser extent in other literatures relating to economics (Swanson, 1996; Swanson et al., 1993), environmental politics and governance (Duffy, 2013; Gehring & Ruffing, 2008; Velázquez Gomar & Stringer, 2011), and conservation science (Abensperg-Traun, 2009; Challender & MacMillan, 2014; Rivalan et al., 2007). Broader associated debates concerning philosophical and ethical aspects of markets in relation to nature and wild animals also appear in the environmental ethics (Callicott, 1990), political ecology (Brockington & Duffy, 2011) and conservation biology (Doak et al., 2014) literatures. Most of these analyses suggest distinct motivational differences and highlight polarisation between views that are more protectionist, being fundamentally opposed to the extraction, consumptive use and trade of wildlife products, and those that view sustainable use and trade as legitimate tools for conservation. However, among conservationists it remains unclear to what extent such divisions arise from established underlying differences in ethics and values (Sandbrook et al., 2011) compared to evidence-based assessments of how trade impacts particular wild species and ecosystems (Natusch et al., 2021).

A group of scientists raised this issue in the context of ongoing disputes over elephant ivory trade policy, suggesting that the continued polarisation stems from conflicts over values and associated 'mental models' of how elephant conservation can be achieved (Biggs et al., 2017). In response, other scientists rejected the suggestion that opposition to ivory trade is grounded in differing core values or objectives, claiming that it

is rather based on differing interpretations of evidence (Sekar et al., 2018). CITES listings and associated trade policy directions rely on scientific evidence (Friedman et al., 2020; Heim & Böcher, 2016), with specialist groups of the International Union for Conservation of Nature (IUCN) playing a key informative (and officially neutral) role. However, consistent with the disagreement over the scientists' interpretations on ivory trade, there is growing evidence that decisions are often determined by political and other factors and influenced significantly by partisan non-state actors (Bauer et al., 2018; Challender & MacMillan, 2019). This has prompted scholars to examine such political factors more closely through lenses of international relations theory (Stoett, 2002) and discursive political ecology (Massé et al., 2020).

Against this background, our research aimed to gain a deeper understanding of the drivers of trade policy conflict in relation to African megafauna, using elephants (*Loxodonta* spp.), black and white rhinos (*Diceros bicornis*, *Ceratotherium simum*), and lions (*Panthera leo*) as case studies (see [Supporting Information S1](#) for further details on the species concerned). These species have recently been the subject of heated trade-related policy debates at both international and national levels, encompassing not only the activity of trade itself but also a range of linked concerns over the nature of supply sources such as captive, managed and legally hunted animals, and the potential use of accumulated product stockpiles or synthetic substitutes. While most of these debates have taken place internationally through CITES and related forums, South Africa has also provided a significant national focal point, hosting CITES CoP17 in 2016 and being involved in recent controversy over domestic rhino trade and its unique practice of commercial captive lion breeding for trophy hunting and trade ('t Sas-Rolfes, 2017). The latter prompted the South African Environment Ministry to appoint an advisory committee ('High-Level Panel') to investigate all the associated issues and conduct a policy review (DFFE, 2020a). This process provided an opportunity to conduct a nested case study for comparative cross-scalar analysis of policy processes.

Redpath et al. (2013) noted that conservation conflicts in general are increasing and argued that it is important to understand and manage them. In the case of wildlife trade, embedded conflict may result in poor policy choices and compromised governance (including ongoing violence; see Duffy et al., 2019), leading to negative conservation outcomes and possibly even species extinctions. We believe that better understanding the underlying drivers of such conflict may provide a critical step towards reducing it. Accordingly, we analyse the past and recent evolution of the trade policy debate, exploring the actors, arguments and relevant themes, and identify key unifying ideas that generate dominant policy narratives. Our results shed light on the ideational factors contributing to conflict by indicating that wildlife trade policy decisions are not simply determined by scientific evidence. They are also determined by normative considerations under the influence of three significant narratives (Global Control, Decentralized Conservation and Animal Protection)

that interact within the existing global policy framework to generate policy outcomes.

Our research contributes to the literature by integrating two separate strands of theory on the ideas driving policy conflict and applying the ideational analysis specifically to the wildlife trade policy process, which has not previously been considered in this way. We proceed as follows: Section 2 outlines our theoretical framework, grounded in political science, to guide analysis of this issue. Section 3 describes the methods we used to collect and analyse data. Section 4 presents our results, and Section 5 concludes with a discussion of their relevance, considering policy implications and recommending avenues for further research.

2 | THEORETICAL FRAMEWORK

The question of what drives trade policy conflict over African megafauna lends itself to a multi-disciplinary approach, as adopted by others examining conservation conflicts (Redpath et al., 2015). Whereas the natural sciences have a role to play in identifying how biophysical parameters determine the limits of sustainable wildlife extraction to supply trade, the factors driving policy conflict fall largely within the realm of the socio-political and hence call for the application of conservation social science (Bennett et al., 2017). Given the substantial role of non-state actors in both the formation of CITES and subsequent shaping of trade policy and regulation (Kosloff & Trexler, 1987; Princen & Finger, 1994), the topic also fits within the scope of research on environmental governance (Armitage et al., 2012; Lemos & Agrawal, 2006).

Research on policy development in general has proliferated and with it the evolution of several different theories of 'the policy process' (Weible & Sabatier, 2017). Theoretical frameworks relating to the policy process typically draw on new institutionalist thought (March & Olsen, 1983), aligned with the proposition that institutions create incentives that shape human behaviour (North, 1990; Ostrom, 1990). In this context, institutions can be defined as "systems of established and embedded social rules that structure social interactions" (Hodgson, 2006, p. 18). We have drawn from the school of 'historical institutionalism' (Hall & Taylor, 1996), which considers both the strategic interactions of purposive actors and role of cultural factors in influencing their behaviour, and which further emphasises power relations and the contribution of other factors, notably ideas, towards outcomes. Within this school, we drew inspiration from a framework developed by Campbell (1998, 2004) and its specific application to research on the transnational temperance movement that drove the global alcohol prohibition wave in the early twentieth century (Schrad, 2010).

More recent academic work has emphasised the central role of ideas themselves (Béland, 2009) and generated concepts of 'discursive institutionalism' (Schmidt, 2008), ideational power (Carstensen & Schmidt, 2016) and a theory of ideational evolution (Carstensen, 2015). The role and power of discourse in framing


	Foreground of policy debate		Background of policy debate	
	Ideas	Actors	Ideas	Actors
Cognitive	<i>Programs</i> (policy prescriptions)	<i>Decision-makers</i> (e.g., politicians, bureaucrats)	<i>Paradigms</i> (elite assumptions to constrain cognitive range of potential solutions)	<i>Theorists</i> (e.g., academics, intellectuals)
 Ideas: Policy narratives Actors: Brokers (e.g. NGOs, expert advisors, media, epistemic communities)				
Normative	<i>Frames</i> (symbols and concepts for public legitimacy)	<i>Framers</i> (e.g., campaign managers)	<i>Public sentiments</i> (public assumptions to constrain normative range of legitimate available solutions)	<i>Constituents</i> (e.g., the public, elites, investors, courts)

FIGURE 1 Analytical framework. Adapted from Campbell (1998, p. 385) and Schrad (2010, p. 21).

environmental problems and solutions to mobilise policy is also a focus of recent work in political ecology. This notably includes research on framings of illegal wildlife trade as a problem of serious transnational organised crime and a global security threat—and the consequent implications for conservation policy and practice (Duffy, 2022; Massé et al., 2020). The theory of ideational evolution, which provides further inspiration for our research, holds that new ideas emerge when political actors conjoin a set of existing ideational elements.

To investigate the evolution of ideas in the wildlife trade policy process, we drew on two strands of policy process research to develop a conceptual framework for analysis. The first is grounded in Campbell's framework, which provides a typology of actors and ideas that influence policy processes, in both the foreground and background of policy debates. Ideas that influence policy debates may be categorised as either cognitive or normative (Campbell, 1998; Schmidt, 2008). According to Schrad (2010, p. 20) cognitive ideas are 'outcome-oriented descriptions and theoretical analyses that specify cause-and-effect relationships,' whereas normative ideas are 'based on shared values, norms, identities and attitudes.' Since both cognitive and normative ideas are apparent in both the foreground and background of policy debates, the Campbell model yields four quadrants with specific types of ideas (ideational realms), which he terms programs, paradigms, frames and public sentiments, each of which is associated with certain types of actors, namely decision-makers, theorists, framers and constituents, respectively (see Campbell, 1998, p. 385). Campbell (2004) also identifies a fifth type of actor, ideational brokers (e.g. expert advisors, media and epistemic communities), who operate at the intersection of the other four realms.

A separate strand of policy process research has developed the Narrative Policy Framework (NPF), which focuses on the strategic use of narratives—compelling stories with a setting, characters (e.g. victims, villains and heroes), a plot and a moral—to influence public opinion and policy decisions (Jones et al., 2014; Shanahan et al., 2011). The notion that ideas conveyed through stories are especially powerful at motivating collective human action is increasingly recognised across various disciplines within the social sciences (Czarniawska, 2004). Narrative policy analysis evolved from the

recognition that many policy issues involve interrelated elements of complexity, uncertainty and polarisation, and that making sense of these may be best achieved by examining the stories of policy-makers and their critics (Roe, 1994). Noting preliminary evidence of narrative elements in the wildlife trade debate, we chose to enrich our analytical framework with conceptual insights from the NPF (Shanahan et al., 2017).

Figure 1 illustrates the framework we used to guide our approach towards analysing the ideational drivers of wildlife trade policy change. We drew from and adapted the framework developed by Campbell (1998, 2004) and Schrad (2010). For our analysis, we identified key actors and their roles in the policy process and examined the ideational elements constituting their positions, guided by the various classifications. However, Campbell's framework makes no provision for overarching ideas that integrate all four categories of ideational elements; it only identifies ideational brokers as overarching actors. We therefore included policy narratives in our framework to fill this lacuna. Applying this framework to recent debates has enabled us to consider the evolving wildlife trade policy discourse in the light of more recent theoretical developments in policy analysis and the contemporary international wildlife trade policy landscape.

3 | RESEARCH APPROACH, MATERIALS AND METHODS

Research took place principally through participation in relevant policy processes. The first author engaged directly with these processes through three main channels:

1. membership of two IUCN specialist groups, whose role is to inform policy with scientific evidence;
2. an association with the Oxford Martin Programme on the Illegal Wildlife Trade (OMP-IWT),¹ which fostered collective research to promote evidence-based wildlife trade policy; and

¹In early 2021 the name was changed to the Oxford Martin Programme on Wildlife Trade.

3. as an appointed member of the South African High-Level Panel (hereafter SA-HLP), which was presented with submissions from a range of non-state actors.

The research consisted of an extended triangulated data collection exercise and concurrent reflexive thematic analysis (Braun et al., 2019; Braun & Clarke, 2019). The data collection strategy was guided by principles of controversy mapping (Venturini, 2010), which outlines a process of identifying statements and linking them to literatures that help to identify actors, their networks and epistemic communities. The first author collected data in the form of official source documents, recorded interviews with nine key actor representatives ('key informants'), and notes from in-person observations, supplemented by regular informal and semi-formal communications and monitoring of social and conventional media channels, over a 5-year period (2016–2020), as detailed below and in [Supporting Information S2](#).

Following an exploratory literature review (academic, grey and popular) to gain an understanding of the landscape of ideas influencing the policy debates, data acquisition and assembly was undertaken in two overlapping stages. Stage 1 consisted of a participatory engagement with international policy processes within the IUCN and CITES community, tracking the evolution of policy debates and outcomes associated with the case study species. This stage began at a meeting of the CITES Standing Committee in January 2016 and ended with the 18th CITES CoP in August 2019. Stage 2, focused on South Africa, commenced with a wildlife economy stakeholder workshop in March 2016 and culminated with participation in the SA-HLP from November 2019 to December 2020. A list of events attended as part of these processes is provided in [Supporting Information S2](#), Table A. For both stages of the research, specific policy issues and actors were purposively sampled using a combination of criterion and snowball sampling methods (Bryman, 2016).

Gaining an adequate perspective of ideas ranging from clearly specified cognitive arguments in the foreground of trade policy debates to less obvious normative public sentiments in the background required the use of diverse and complementary sources of data and an iterative, reflexive approach to analysis (Srivastava & Hopwood, 2009). Unveiling aspects of the background ideas required understanding arguments and underlying concepts from diverse disciplines including conservation science, environmental ethics, economics, law and social psychology. Throughout the research process, the first author investigated evidence of associations between actors (including both observable interactions and references in their statements and publications) to identify likely background influences on ideas in the foreground of policy debates. The combination of complementary data collection methods and multi-scalar analysis, with triangulation between multiple actors and data source types, enabled research to reach a point of saturation (Busetto et al., 2020; Fusch & Ness, 2015), beyond which no more significantly different ideas could be observed.

3.1 | Data collection

The principal method of data collection for both stages was through participant observation (DeWalt & DeWalt, 2010; Kawulich, 2005) in various forms. This was supplemented throughout the process by monitoring of various media and group communication channels, as well as targeted communication and consultation with various stakeholders and key informants. All key informant input has been anonymised and the research methods applied to this project received ethics approval under the Oxford University CUREC system, reference # SOGE 1A-170. Further details on data collection methods and sources are provided in [Supporting Information S2](#). Informed written consent was received from the nine key informant interviewees to record the formal interviews listed in [Supporting Information S2](#), Table C.

3.2 | Data analysis

The data were analysed following Braun and Clarke's (2019) reflexive thematic approach to identify themes across policy issues, actor categories and ideas. This entailed following the six phases of (i) initial familiarisation, (ii) generating initial codes, (iii) searching for themes, (iv) reviewing themes, (v) defining and naming themes and (vi) writing up as originally described by Braun and Clarke (2006), and doing so reflexively, that is, iteratively while revising assumptions and categories where appropriate if new themes became apparent. Preliminary themes identified during the exploratory literature review were thus evaluated and refined throughout the data collection period. The exploratory review provided an indication of the identity of actors associated with promoting specific ideas and formed a basis for understanding the underlying assumptions of the policy debate, that is, the 'background' (see [Figure 1](#)), which could then be followed by closer analysis of the 'foreground' through the participatory process.

Policy issues raised through CITES meeting agenda items were classified thematically across the case study species, and these themes were refined following stakeholder inputs in South Africa during Stage 2 of the research. Actors were categorised through use of an extended actor typology, as detailed in [Supporting Information S3](#), and their positions and arguments ('stances') on the relevant CITES agenda items and related thematic issues were recorded and coded to generate the ideational themes.

Initial ideational themes were classified as either cognitive ideas (characterised by assumed causal relationships) or normative ideas (characterised by social values and attitudes). However, some conflation of categories was observed (e.g., value-driven but unproven assumptions of causality, such as blaming another actor's position for an outcome), and this was noted in relation to the identification of policy narrative elements. For relevant CITES agenda items, the emergent ideational themes were cross-referenced by policy issue and actor category using coded spreadsheets, to identify patterns and relationships revealed through

sorting and clustering. After refinement of the ideational themes, the SA-HLP stakeholder submissions were analysed following the same protocol.

Wherever possible, cognitive ideas expressed as programs within the CITES framework were traced back to theoretical concepts (representing 'paradigms') in the peer-reviewed literature—this was typically done by consulting referenced sources. Normative ideas, both in the form of frames and public sentiments, were more challenging to classify and source-trace. However, the identified normative themes that served to frame and justify trade policy prescriptions provided a strong indication of narrative elements, as did overt challenges to the legitimacy of other actors. The final analysis traced themes across issues, actors, cognitive and normative ideas, and different scales of governance, to identify distinct policy narratives on trade in African megafauna.

4 | RESULTS

We present the results in five sections. The first describes the specific trade policy issues that were identified and followed through both stages of research, starting with an account of policy changes. The second outlines our findings on actors. The third and fourth discuss, respectively, the cognitive and normative ideas that emerged through the observed discourse and that were further illuminated through key informant interviews. The final section outlines key features of three identified policy narratives.

4.1 | Trade policy issues

During the 5-year study period, a range of specific trade-related issues were vigorously debated across the case study species, both internationally and within South Africa (see [Supporting Information S2](#), Table B; DFFE, 2020a). However, these deliberations resulted in relatively few actual policy changes during this time. In relation to elephants, two significant international trade policy developments took place. The first was the further entrenchment of ivory trade restrictions, through various incremental policy shifts within the CITES framework; these included the defeat of an attempt by southern African countries to establish a decision-making mechanism for future legal trade and the imposition of new restrictions in various domestic ivory markets, including the USA, EU, UK, China and Japan. The second was the placement of additional restrictions on the trade of live elephants, by way of a CITES resolution (CITES, 2019b). Discussions on elephant-related trade issues occupied a substantial proportion of the allocated time in CITES Standing Committee meetings and Conferences of the Parties and included an unsuccessful attempt to list the extinct woolly mammoth in CITES, aimed at monitoring the mammoth ivory trade.

Limited international policy change took place in relation to rhino trade during the study period, although rhinos remained a prominent CITES agenda item. South Africa was granted an effective

increase in its hunting trophy export quota for the black rhino species (CITES, 2019a) and, within the country, the courts overturned a moratorium on domestic rhino horn trade (Stoddard, 2017), but this was of limited impact due to continued tight restrictions (Clements et al., 2020).

Despite occupying less time and space on CITES meeting agendas, there were two substantial changes in relation to lion trade in 2016: the United States suspended all hunting trophy imports from lions bred in captivity, and at CITES CoP17 (in late 2016) the Parties imposed a zero quota on all body part trade with an exemption for South Africa, which was mandated to establish an annual export quota of lion carcasses from captive bred sources only. However, this decision became highly contentious, and the quota and quota-setting process were domestically challenged, through both the South African Parliament and the courts, causing the curtailment of exports and providing the catalyst for the creation of the SA-HLP. In the final SA-HLP report, a majority view recommended terminating South Africa's commercial captive lion breeding industry (DFFE, 2020b).

Several thematic policy issues appeared across the case study species. A starting point of debate related to varying opinions concerning the threats to these species and the associated impact and social legitimacy of (i) extraction from the wild, (ii) consumptive uses and (iii) 'physical' commercial trade (in which 'physical' specifically denotes corporeal trade in live animals and their body parts as distinct from trade in, for example animal viewing and filming rights). These varying opinions led to disagreements over which CITES Appendix listing was most appropriate and whether certain annotations were justified to create exceptional conditions, such as quotas or differentiated treatment for certain products. Directly related to this were questions of the extent to which trade in live animals or their body parts should be legally permitted and for what purposes. Those questions were linked to three further issues. The first concerned keeping and breeding these species in captivity and the potential for 'farming' them, which provides a frequently used avenue for legal trade in Appendix I listed species under CITES. The second concerned the retention, management, and potential future use or trade of accumulated legal stockpiles of body parts. Such stockpiles may accumulate from various non-farming sources, through collections from natural mortalities of wild animals, and through management practices such as culling lions and elephants for population control and dehorning rhinos for security purposes. A third issue concerned exemptions made for trade in hunting trophies, given growing public opposition to the practice of legal recreational hunting of iconic species.

The above issues were vigorously debated and contested throughout the study period, both internationally and within South Africa. A final issue, largely ignored within South Africa, but salient internationally, concerned the desirability of allowing or enabling trade in imitative substitute products, either from similar extinct species (termed here as 'simulants') or produced through new technologies such as synthetic biology. [Table 1](#) provides a list of these key thematic issues and the key questions relating to them.

TABLE 1 Key thematic issues.

Issue theme and sub-theme	Question: Under what circumstances are the following acceptable?
1. Extraction	Removing animals from the wild
1a. Lethal	– Killing wild animals
1b. Non-lethal, whole	– Removing live animals from the wild for translocation
1c. Non-lethal, part	– Removing body parts from live or naturally deceased wild animals
2. Consumption	Utilising wild animal body parts as food, medicine, ornaments, etc.
3. Physical commercial trade	Commercial trade in live animals or body parts
3a. Live animal trade	– Commercial trade in live animals
3b. Trade in animal parts	– Commercial trade in body parts and derivatives
4. Commercial captive breeding	Breeding wild animals in captivity for commercial purposes
5. Stocks of body parts (and derivatives)	Retention of body part stocks for potential future use or trade
6. Trophy trade	Movement of hunting trophies across jurisdictional boundaries
7. Imitative substitute products	Allowing trade in simulant and synthetic products

4.2 | Actors

Our research revealed a range of intergovernmental, state and non-state actors that engage in elements of wildlife trade policy discourse, as detailed in [Supporting Information S4](#). We identified 14 non-state actors that were engaged both at the international (CITES) level and in the SA-HLP process, with varying orientations. Significantly, we found that most key actors played multiple roles according to Campbell's typology; most larger scale non-state actors also played the role of broker and were likely to have varying and nuanced stances (see [Supporting Information S4](#), Table F). Within the most extensive organisational actor, the IUCN, there were critical disagreements over issues such as hunting trophy trade (IUCN, 2019), domestic ivory trade (Stuart et al., 2019) and captive lion breeding (DFFE, 2016). These revelations about actor role complexity reaffirm the need to engage more specifically with ideational elements to gain deeper insight into wildlife trade policy conflict.

4.3 | Cognitive ideas

Trade policy decisions, taken by state actors either through CITES or at domestic levels, are expected to be informed by cognitive ideas:

that is paradigms and programs ([Figure 1](#)), grounded in scientific evidence of causal relationships that link different trading regimes to conservation outcomes. The default logic of the CITES system is that if a species is deemed to be threatened by trade, monitoring and regulation of international trade through an Appendix II listing will help to mitigate this threat; furthermore, for species deemed to be threatened with extinction and affected by trade, a ban on international commercial trade (as per an Appendix I listing) will provide further mitigation. Evaluation of the threat is informed by the global IUCN Red List species assessments but ultimately determined through the state-driven process of undertaking 'non-detriment findings' (NDFs). The criteria and methods used for NDFs vary across countries, with some focusing only on biological aspects and others including socio-economic factors. We found that not all state actors share the same views or understanding of the causal links between trade and conservation outcomes, with some inferring that trade always constitutes a threat to species and others viewing appropriately regulated trade as potentially enhancing species conservation, citing evidence from southern African countries.

This difference in perception of causal links was more marked among non-state actors and evidently linked to broader and longer-term debates over the effectiveness of extractive forms of sustainable use as an approach to conservation (Hoyt, 1994; Hutton & Leader-Williams, 2003; Ludwig et al., 1993). Cognitive arguments against trade tended to express scepticism over whether extraction and trading regimes are sustainable in practice, whereas those in favour of trade tended to link it to postulated incentive mechanisms that benefit conservation of species and ecosystems by way of socio-economic benefits, that is financial, livelihood, and other returns to conservation management agencies, private landowners and local communities. These broadly opposing views tended to be linked to other arguments relating to the identified issue themes. Sustainable use sceptics were also more likely to raise animal welfare concerns in relation to the case study species, highlighting various causal links between trade-related activities and harms to individual animals. [Supporting Information S4](#) provides detailed descriptions of observed contrasting cognitive arguments, which are summarised in [Table 2](#), below.

A notable feature of most cognitive arguments around trade policy toward the case study species was the extent of disagreement, uncertainty and general lack of substantive empirical evidence regarding causal relationships between trade policy, trade-related activities and conservation outcomes, especially at international levels. This issue was acknowledged by some state actors and reflected in background peer-reviewed literature but denied by many non-state actors and some academics, who either claimed that sufficient evidence existed or argued that certain policy decisions (typically restrictions) were justified on grounds of applying a precautionary approach. Persistent disagreement on these issues was reflected in the final report of the SA-HLP, in which Panel members were unable to reach consensus on the causal links between captive lion breeding, hunting and legal skeleton export trade and threats to wild lions,

TABLE 2 Cognitive arguments that support or oppose trade and related activities.

Issue	Supportive	Opposing
1. Extraction	Sustainable offtake can yield biodiversity and socio-economic benefits	Sustainable and harmless offtake not possible if commercial
Lethal	Can be supportive or even necessary for conservation	Harms individual animals and disrupts their social structures
Non-lethal, whole	Can be supportive or even necessary for conservation	May affect animal welfare and disrupt social structures
Non-lethal, part	Can be supportive or even necessary for conservation	May affect animal welfare and well-being
2. Consumption	Provides opportunities to benefit conservation through trade	There is insufficient supply to meet insatiable demand
3. Physical comm. trade	Yields socio-economic benefits for conservation	Over-stimulates consumer demand and enables laundering
4. Comm. captive breeding	Delivers socio-economic benefits; provides supply source to reduce pressure on wild populations; some potential for reintroduction to wild (maintenance of genetic buffer)	Negative impacts on animal welfare; potential adverse genetic effects from selective breeding; increased zoonotic disease risk; may cause further wild harvesting
5. Stockpiling body parts	Future source of income that can pay for conservation; insurance against speculation-driven poaching (buffer effect)	High storage costs; risk of demand stimulation through leakage or signalling that future trade is acceptable
6. Trophy trade	Regulated recreational hunting can provide ecological and socio-economic benefits that enhance conservation outcomes	Recreational hunting harms individual animals and disrupts their social structures; trophy export exemptions can enable product laundering
7. Imitative substitutes	Can displace and suppress demand for genuine wild products	Can perpetuate or stimulate demand for the genuine wild-harvested products and enable laundering

as well as the appropriate conservation role of private rhino breeding and trade (DFFE, 2020b).

To date, most research on causal links between international wildlife trade and conservation outcomes has been conceptual rather than empirical, with a focus on the elephant ivory trade and some discussion around potential effects of wildlife farming (Fischer, 2010; 't Sas-Rolfes et al., 2019). Such research identifies complex market interactions along supply chains and postulates ambiguous or uneven outcomes for conservation, contingent on numerous factors that vary significantly between species, jurisdictions and site-specific contexts (e.g. proximity to international borders or disaffected local communities). Cognitive arguments about the effects of trade policy are therefore subject to scale effects and uncertainty. This adds a political dimension and raises questions over how best to deal with uncertainty and risk, thereby introducing a normative element to policy discussions.

4.4 | Normative ideas

Our research revealed that normative ideas (comprised of values and attitudes) played a strong, often dominant, role in the trade policy discourse during the study period. In most instances in which actors opposed trade or a trade-related activity, cognitive arguments were bolstered by normative arguments, with the distinction between the two categories sometimes unclear, notably regarding animal welfare concerns and perceptions of species endangerment and risk. Within the realm of normative ideas, three thematic focal areas of concern were evident, and could be categorised as anthropocentric, eco-centric and sentiocentric. Anthropocentrism places humans at the centre of moral concern, ecocentrism holds that natural ecosystems

have intrinsic value independent of humans and sentiocentrism places sentient beings at the centre of moral concern and therefore extends consideration of the conventional norms that structure and govern relationships among humans to non-human animals. Few actors self-identified as subscribing to only one of these three value systems; however, there were clear differences in emphasis, the most noticeable being in relation to sentiocentric arguments (e.g. killing wild animals is unethical—see Ramp & Bekoff, 2015), which tended to be juxtaposed with anthropocentric positions. The observed key normative arguments are detailed in [Supporting Information S4](#) and summarised in [Table 3](#), below.

Normative arguments relating to the three case study species appeared to be grounded in background sentiments that formed the basis for framings in the foreground of policy debates. Anti-trade positions drew on public sentiments against killing and physical harm of wild animals, especially those perceived to be rare and iconic, as well as notions that actors involved in trade-related activities were motivated by greed and selfish pleasure and therefore lacked virtue. Linked to these sentiments were notions of an undesirable loss of wildness and an apparent distaste for excessive commodification and commercial development, which were seen as associated driving factors. Public sentiments supporting trade activity were less obvious but seemed generally grounded in notions of sustainably managing wildlife as resources for the benefit of society and especially local communities, thereby ensuring a better (balanced) future for humans, wildlife and the environment alike.

Anti-trade sentiments readily translated into framings that emphasised peril and crimes against nature, fuelled by greed and ignorance, invoking a need for compassion, protection, and education to overcome the threats to the welfare and security of both wild animals and humans. The theme of security was applied to protecting

TABLE 3 Normative arguments that support or oppose trade and related activities.

Issue	Supportive	Opposing
1. Extraction	Sustainable harvest can meet socio-economic needs of the poor, support cultures and help to maintain natural ecosystems	Extraction constitutes interference in natural ecosystems and harms sentient animals
Lethal	Killing some animals is justified for the greater good, subsistence and ecosystem management	Killing sentient animals is fundamentally unethical
Non-lethal, whole	Harvesting live animals for translocation and trade can help with managing populations and providing conservation finance	Harvesting live animals from the wild has implications for their welfare and well-being
Non-lethal, part	Harvesting animal body parts can provide economic benefits that can help support people and biodiversity conservation	Harvesting body parts of rare and sentient wild animals is not socially legitimate
2. Consumption	Consuming wild animal products is natural for humans, part of many cultural heritages and justified if sustainable and ethical supply sources are used	Consuming wild animal products is unacceptable in contemporary society due to associated risks and harms to people and wildlife
3. Physical commercial trade	Trade is justified if sustainably sourced and can generate net positive benefits for people and biodiversity	Physical trade is exploitative, driven by human greed, fuels illegal activity and poses security risks to society
Live	Live commercial trade can be beneficial provided appropriate welfare and sustainability standards are met	Commercial trade in live sentient animals is unethical and harms their welfare and well-being
Parts	Managed legal trade from sustainable sources can generate benefits for people and wildlife	Illegal trade in body parts fuels poaching and other crime and is a security threat; legal commercial trade enables wildlife crime and should be banned
4. Commercial captive breeding	Provided appropriate welfare and genetic standards are set, commercial captive breeding can generate numerous positive benefits for people: for example livelihoods, aesthetic appreciation, education, recreational and scientific research advances	Commercial breeding and associated practices such as live trade, animal interactions and put-and-take hunting are inherently exploitative, abusive and incompatible with traditional conservation values
5. Stockpiling body parts	Stockpiles are valuable assets with potential future use; destroying them undermines future conservation incentives	Destroying stockpiles is necessary to signal that trade and consumption will no longer be tolerated
6. Trophy trade	Hunting and the taking of trophies is supported by many cultural traditions; preventing trophy trade harms people by affecting their livelihoods, undermines conservation incentives and can therefore also harm both species and their habitats	Killing individual animals for pleasure and profit is unethical, especially from threatened species
7. Imitative substitutes	Suppressing cultural traditions is wrong and providing substitutes that do not harm animals is morally justified	Approving such substitutes inappropriately legitimises use of the genuine products; alternatively, it might undermine genuine sustainable use initiatives

individual animals from harm, protecting wild nature and mitigating zoonotic disease risk through precautionary measures. Hence, the overriding policy framing of anti-trade sentiment was one of protection and precaution. Trade-supportive framings were grounded in the essentially anthropocentric concept of sustainable development, emphasising the achievement of efficiency, equity and sustainability through good governance and judicious use of natural capital, supported by appropriate recognition of national sovereignty, human rights and the imperative for just socio-economic development.

4.5 | Policy narratives

Actor statements and stances on policy issues frequently conflated cognitive and normative ideas to produce over-arching narratives relating to wildlife trade. Within the defined setting of the global

marketplace for physical wildlife products, which wildlife trade policy seeks to regulate, we identified three distinct policy narratives in relation to African megafauna. We term these three narratives 'Global Control', 'Decentralized Conservation' and 'Animal Protection'. The first two are closely linked to previously identified environmental conservation narratives, but the third has not been explicitly recognised in this domain, despite being readily identifiable by consistent narrative elements.

The *Global Control* narrative aligns with a previously identified broader narrative termed 'Finite Earth' (Jepson, 2018) and provides a plot of worrying excessive exploitation of threatened species for trade, which is best addressed through a global controlling mechanism established and governed by morally enlightened decision-makers. In this narrative, the victims are endangered species and global society, the villains are those exploiting those species (poachers, illegal traders, and those who enable their activities, including

non-compliant state actors), and the heroes are the creators and implementors of the global governance system. In the more detailed plot, various heroes play specific roles: scientists identify trade threats to species, lawyers draft the necessary regulations and bureaucrats and law enforcement officials implement them. Non-state actors facilitate the system by assisting with monitoring, raising public awareness and funding, and changing public perception and behaviour. The moral of the story is that through cooperation and law abidance, the forces of good exercised through a top-down international regulatory regime can gain effective control of wildlife trade, to the benefit of the threatened species.

The Global Control narrative framed 20th century wildlife trade policy and the design of CITES, which it would thus present as both a legitimate and functional regime. Adhering to this narrative need imply no normative preference between Appendix I and II listings and would simply assume that these are scientifically determined and work essentially as intended across all scales of government. This policy narrative appears to receive continued support from most state actors, intergovernmental agencies and some mainstream environmental conservation NGOs.

The *Decentralized Conservation* narrative includes elements of other previously identified narratives termed 'Resource Earth' (Jepson, 2018) and 'Community Conservation' (Hutton et al., 2005). These elements emphasise the role of providing socio-economic incentives to relevant local people to achieve species conservation by way of appropriately regulated market institutions that support sustainable use outside of state protected areas. Decentralized Conservation differs from the Global Control narrative in that it is sceptical of top-down approaches and excessive trade restrictions, asserting that these may in fact be counterproductive. In this narrative, the victims include not only the threatened species and their habitats but also previously disadvantaged local communities who were historically deprived of traditional access, use and benefit-sharing rights, and may still bear the costs of living with dangerous animals. The role of local poachers as villains is downplayed relative to external facilitators of larger scale criminal activities and exploitation, including both extraction and habitat conversion. The heroes of this narrative include actors who develop institutional arrangements that enhance local incentives for long-term species and habitat conservation while providing livelihoods for local people; they would thus include certain politicians, economists and other social scientists, as well as fair-minded, law-abiding participants in the wildlife economy, including landholders, managers, entrepreneurs and consumers. The plot thus entails the devolution of meaningful wildlife ownership and use rights to local levels, following which sustainable trade can be enabled through appropriate regulation if local actors wish to benefit from it.

The moral of the Decentralized Conservation narrative is that by empowering local people with rights to participate in the management of—and receive benefits from—endangered megafauna, they will feel a strong sense of stewardship over these populations and ensure their conservation, to the collective benefit of all. This

narrative calls the full effectiveness of regulatory regimes such as CITES and the Endangered Species Act into question, noting that they can create perverse incentives through the excessive imposition of restrictions and punitive measures that victimise local people, and may ultimately fuel criminal activity as a form of resistance. Hence, it would tend to favour CITES Appendix II listings and domestic regulatory frameworks that enable trade that is legal, sustainable and fair, as opposed to long-term bans. Supporters of this narrative include some state actors and various non-state actors, including community organisations, private landowners and various wildlife industry participants. These actors also often view opponents of physical wildlife trade, whom they typically (and inaccurately) label as 'animal rightists', as villains.

The *Animal Protection* narrative, while somewhat aligned with a well-recognised 'Animal Rights Metanarrative' (Roe, 1994), is uniquely positioned in relation to wildlife conservation, having evolved as a counter-narrative to the notion of sustainable use (see Hoyt, 1994, who provides an effective manifesto for this narrative). In contrast to the two earlier narratives, Animal Protection adopts a more overtly sentiocentric position, and the principal victims are clearly identified as individual wild animals, with collectives such as species and ecosystems playing a lesser (but still salient) role, along with humans affected by animal harm. This narrative considers physical commodification of wildlife as fundamentally unacceptable and therefore regards all its enablers as villains. Villains thus include all actors directly involved in physical trade, whether legal or illegal, including poachers, legal hunters, commercial breeders, traders, smugglers, product processors and wilful consumers, all of whom are regarded as exploiters. Other villains include state and non-state actors that enable such exploitation to continue, including academics and other advocates for sustainable use, and even those who fail to act once made aware of the injustices. Heroes include all actors involved in bringing an end to animal exploitation, from those physically rescuing harmed or threatened individuals to those working to permanently outlaw all forms of consumptive use and enforce such laws once in place. Such heroes could be state or non-state actors, playing various supporting roles along supply chains and within society in general (e.g. by raising awareness and funds).

The basic plot of this narrative involves rare and iconic wild animals, threatened by human exploitation, that must be protected from individual harm and collective extinction. A more detailed sub-plot, specific to trade policy, depicts misguided actors who promote and practice the sustainable use approach to conservation through the provision of legal supply alternatives. Their initiatives are portrayed as either unethical or too risky (or both), being likely to stimulate demand and provide cover for illegal activity and abuse, thereby leading to further exploitation and possible extinction. The moral of the story is that complete protection through abolition of use—leading to permanent human behaviour change—is the only long-term solution that is safe, ethical and ultimately effective. Animal Protection is sceptical of the role of CITES Appendix II, holding that adequate control of extractive use for commercial and consumptive ends is not practically possible. It therefore sees Appendix I listings

or their equivalent as imperative for all sentient animals and especially the case study species, starting with elephants as the most obviously sentient.

Support for the Animal Protection narrative in relation to wildlife trade policy appears to have originated with a relatively small number of animal welfare NGOs in the early days of CITES (based on historical records) but has grown substantially in the wake of the ivory trade ban and the debates that it spawned. Current supporters include a growing number of state actors and a dedicated and growing coalition of non-state actors, spearheaded by a core group of international NGOs. This coalition receives increasing support from academics (notably in the fields of animal ethics, environmental and animal law, and conservation biology), the wildlife tourism industry, celebrities and the media, including activist writers and filmmakers. Of the three policy narratives relating to wildlife trade, Animal Protection currently appears to be providing the most effective platform for a coherent and cohesive social movement, as indicated by its surging presence in the South African trade policy debate during the case study period.

5 | DISCUSSION

Applying our analytical framework to international and South African wildlife trade policy debates relating to the case study species provides insights into the ideational influences that inform and shape actor positions. Whereas specific actors in policy processes play clearly influential roles, our analysis contributes and lends weight to the growing literature on the critical significance of ideas, especially in relation to ideational evolution and ideational and discursive power. Our results provide added insight into the discursive mechanisms through which, for example, public opinion can be influenced to support changing approaches to foreign conservation assistance (Massé & Margulies, 2020), including through media misinformation (Hart et al., 2020). They highlight that cognitive ideas and scientific evidence may carry less relative weight than normative arguments, especially when both are subsumed within broader policy narratives.

The three identified policy narratives, which also align somewhat with previously identified branches of eco-political thought—namely authoritarian, utilitarian and radical ecology (Stoett, 2002)—also highlight the broader disparate social tensions within the wildlife trade policy community. To illustrate this point further, we contextualise this result within the longer-term evolution of CITES and ideas about wildlife trade policy, notably attitudes toward bans, before drawing some conclusions.

The formation of CITES appears to have been dominated by a cluster of cognitive and normative ideas most closely aligned with the Global Control narrative. In the opening speeches of the first Conference of the Parties (CITES, 1973), potential tensions between different worldviews were concealed by the interchangeable use of the words 'conservation', 'preservation' and 'protection', terms that already signified somewhat divergent ethical stances at the time (Norton, 1986). CITES attempted to accommodate fundamentally

different wildlife management philosophies—for example, the North American model, which rejects private wildlife ownership and markets (Geist, 1994) and various African models that had successfully enabled both (Child et al., 2012). This divergence in philosophies had surfaced markedly by CoP7, by which time the three distinct policy narratives had emerged in relation to the ivory trade debate, as indicated by various accounts in the popular literature (e.g. Barbier et al., 1990; Bonner, 1993; Douglas-Hamilton & Douglas-Hamilton, 1993). The Animal Protection narrative evidently gained further support following new scientific revelations of elephant sentience through the work of ethologists and provided additional impetus for the 1989 ivory ban (Poole & Thomsen, 1989). However, the ban stimulated a reaction that led to a firming of the Decentralized Conservation narrative (Sugg & Kreuter, 1994), which led to large mainstream conservation NGOs aligned with the Global Control narrative being criticised from both sides (Princen, 1994).

After strong lobbying from Southern African countries during the 1990s, the CITES Parties agreed to the differential treatment of certain range states with large and relatively secure elephant and rhino populations (Thompson, 2004). Such concessions included specific national down-listings to Appendix II (so-called 'split-listing' of species) with restrictive annotations, and agreement to allow strictly controlled sporadic ivory sales, subject to various conditions being met. Two such sales were approved and eventually took place, prompting fierce debate over their impacts on elephant conservation, especially since the second final approval coincided with resurgent poaching driven by rapidly growing East Asian consumer demand (Somerville, 2017). This surge in demand and associated poaching, which also affected species such as rhinos and pangolins (*Manidae*), prompted strong responses from actors associated with both the Global Control and Animal Protection narratives, fuelling the vigorous campaigns against the illegal wildlife trade, and increasingly legal trade, during the last decade. These campaigns have relied most heavily on normative arguments, given the persisting uncertainties and disputes over empirical evidence.

Supported by the recent work of others, our research has revealed that many claims of universal causal links between controversial trade-related activities and adverse conservation outcomes are grounded in both tenuous theoretical assumptions and limited empirical evidence. This applies not only to wildlife trade in general ('t Sas-Rolfes et al., 2019; 't Sas-Rolfes & Hiller, 2021) but also to activities such as wildlife farming (Hinsley & 't Sas-Rolfes, 2020; Williams & 't Sas-Rolfes, 2019), stockpile management ('t Sas-Rolfes et al., 2014), trophy hunting (Di Minin et al., 2021) and supply of simulant and synthetic products (Chen & 't Sas-Rolfes, 2021; Farah & Boyce, 2019). Wildlife trade, associated activities, and the regulation thereof take place in the context of complex-adaptive social-ecological systems, in which many diverse variables may influence conservation outcomes, which therefore tend to be highly situational and defy oversimplification (Cooney et al., 2015).

Concerted efforts over the last two decades to establish various databases to assist CITES decision-making are starting to support global enforcement relating to elephant ivory trade but the data

remain open to variable interpretation and to date have been insufficient to help resolve trade policy debates. A recent analysis of ivory prices suggests that elephant poaching is relatively inelastic, that is somewhat insensitive to changes in trade policy (Do et al., 2020), a conclusion supported by recent evidence of continued elephant poaching despite intensification of ivory trade ban measures (Schlossberg et al., 2020). A more recent detailed analysis of elephant poaching drivers draws on CITES databases to affirm that factors such as governance quality, human development and site-level enforcement play significant roles along with ivory prices (Kuiper et al., 2023); however, the relationship between these factors and current elephant trade policy is unclear and possibly tenuous.

In the absence of clear and decisive empirical evidence on causal relationships, environmental treaties, including CITES, have officially adopted the 'precautionary principle' (Kriebel et al., 2001). However, in the context of wildlife trade, the precautionary principle can be applied in different, sometimes conflicting, ways and there is evidence of inconsistent application within the Convention text itself (Dickson, 1999). Similar evidence exists within the various arguments used to support the distinct wildlife trade policy narratives. In essence, one interpretation of the precautionary principle would hold that commercial wildlife trade is inherently risky and therefore must be actively restrained by default. An alternative interpretation would hold that any proposed change in trade policy, including the imposition of restrictions, should be subject to a cautious prior assessment, to avoid any potentially detrimental unintended consequences.

Our research revealed that proponents of the former interpretation (some of whom also used the term 'highly precautionary approach') applied it not only at the species level, but at the level of individual animals. One key informant interviewee stated that they "would put the intrinsic value of a live elephant above the entire stock of world ivory." This quote stands in sharp contrast with a state actor who stated that recreational hunting and trophy trade was considered as a "means of converting surplus wild animals into social benefits." The latter view was aligned with research suggesting that a ban on trophy trade would have significant negative socio-economic and conservation impacts (Naidoo et al., 2016), thereby implying that such a ban would not be precautionary in terms of the alternative interpretation (and implicitly accepting the notions of 'surplus' animals and ecological sustainability of the practice).

Public perceptions of risk are widely recognised as being potentially biased and linked to social group cohesion (Slovic, 1987), which in turn is strongly influenced by shared moral values (Haidt, 2008). Moral judgements are furthermore grounded in emotionally driven social intuitions and subject to post-hoc reasoning (Greene, 2014; Haidt, 2001). Research on divergent opinions in climate change science reveals that they are closely linked to cultural polarisation, which is greatest among those with the highest levels of science literacy; this highlights a potential influence of moral tribalism on scientific neutrality and suggests that research on ethically contested topics may be prone to directionally motivated reasoning (Kahan et al., 2012; Lord et al., 1979). These insights reemphasise the

binding power of normative ideas and policy narratives and provide a plausible explanation as to why ostensibly scientific decisions on wildlife trade policy may be overwhelmed by ethical considerations and politics.

An early 1990s review of CITES and the ivory ban (Princen, 1994) noted that trade bans might be increasingly employed within CITES, causing it to evolve from a limited trade regulation regime to a 'global prohibition regime' (Nadelmann, 1990). Our analysis suggests that the fusion of elements of the Global Control and Animal Protection narratives provides fertile ground for the entrenchment of CITES as a global prohibition regime and there is evidence of this happening in the wake of the most recent surge of African megafauna poaching and trade. Recent scientific literature on wildlife trade in general reflects growing criticism of its negative impacts and scepticism that these can be mitigated through mere regulation of legal trade (e.g. Frank & Wilcove, 2019; Macdonald et al., 2021), further reinforcing the prohibition drive and calls to overhaul CITES accordingly (Couzens, 2013). This raises important questions about the future of the Southern African model of wildlife conservation, which is heavily reliant on sustainable extractive wildlife uses to create both direct and indirect incentives for conservation, against a background of severe funding constraints, exacerbated by COVID-19 (Abensperg-Traun, 2009; Lindsey et al., 2020).

Our analysis confirms that wildlife trade policy satisfies the definition of a 'wicked problem' (Rittel & Webber, 1973), providing a platform for actors to pursue multiple objectives that overlap and conflict to varying degrees, against a background of complexity and uncertainty. This is illustrated by the varying (and inconsistent) tensions between anthropocentric, ecocentric and sentiocentric sentiments that underlie normative arguments, framings and narratives that shape the policy debate. The three distinct policy narratives, which are not mutually exclusive, appear to pursue disparate goals, namely control of wildlife trade, sustainable development and physical decommodification of wild animals. The more detailed narratives expose critical ideological tensions. The tensions between Global Control and Decentralized Conservation align to a broader long-standing tension between political traditions that are grounded, respectively, in the sociological and rational choice models of human behaviour (Masters, 1982). The Animal Protection narrative introduces a new level of complexity to such political debates by adding another dimension—that is the inclusion of sentient animals into the political calculus.

The Decentralized Conservation narrative does not preclude the partial implementation of Animal Protection values—for example, within designated strictly protected areas. However, these two narratives conflict in relation to the acceptable human treatment of wild animals outside of such areas. Hence, the Animal Protection narrative appeals to Global Control to implement its vision of worldwide physical decommodification, thereby also rejecting appeals for conservation and environmental policy to embrace ethical pluralism and pragmatism (Minteer, 2011; Pascual et al., 2021; Robinson, 2011). Animal Protection through Global Control produces a vision of the future of conservation that is in clear ideological conflict with the

latter, and this represents a widespread phenomenon identified and labelled by social scientists as a 'conflict of visions' (Pinker, 2002; Sowell, 1987). In this conflict, a 'Utopian Vision' of liberating all sentient wild animals through fundamental social change and 'decommodification' confronts the 'Tragic Vision' of a world in which human nature is less malleable and behaviour is best guided by incremental changes to existing institutions, with due consideration of long-standing traditions and individual incentives.

What are the future implications for wildlife trade policy and conservation of African megafauna? Béland (2019) argues that whereas narratives moralise and shape problem definition, institutional legacies ultimately influence policy adoption. This implies that policy changes called for by the South African High-Level Panel will still face significant implementation constraints as they confront the constraints of existing institutional arrangements, including informal institutional responses. It also implies that international wildlife trade policy will remain substantially guided by the basic structure and logic of CITES. Given that the Appendix listing system of CITES entrenches a polarising tension between proponents of commercial prohibition (Appendix I) and sustainable use (Appendix II), the future implications of this are certainly worth considering further in the light of the above analysis. Will the current prevailing trend toward prohibition prevail and, if so, what are the likely consequences for the conservation of African megafauna and even the future viability of CITES itself? These questions warrant further research.

AUTHOR CONTRIBUTIONS

Michael 't Sas-Rolfes conceived of the ideas; Michael 't Sas-Rolfes and Jennifer Gooden designed the methodology; Michael 't Sas-Rolfes collected and analysed the data; Michael 't Sas-Rolfes led the writing of the manuscript. Both authors contributed critically to the drafts and gave final approval for publication.

ACKNOWLEDGEMENTS

We thank Paul Jepson, Dan Challender, Amy Dickman, Constance McDermott and two anonymous reviewers for comments on earlier drafts of this paper. Michael 't Sas-Rolfes gratefully acknowledges funding from Earthmind.

CONFLICT OF INTEREST STATEMENT

The authors have no conflict of interest to declare.

DATA AVAILABILITY STATEMENT

Most data are in the public domain, with two exceptions. Recordings of the key informant interviews have been retained by the lead author and require permission from the interviewees to be shared. The South African High-Level Panel submissions are only available upon specific request to the South African Department of Forestry, Fisheries and the Environment, following the protocols prescribed by the Promotion of Access to Information Act (PAIA).

ORCID

Michael 't Sas-Rolfes  <https://orcid.org/0000-0002-2220-6072>

REFERENCES

- Abensperg-Traun, M. (2009). CITES, sustainable use of wild species and incentive-driven conservation in developing countries, with an emphasis on southern Africa. *Biological Conservation*, 142(5), 948–963. <https://doi.org/10.1016/j.biocon.2008.12.034>
- Armitage, D., De Loë, R., & Plummer, R. (2012). Environmental governance and its implications for conservation practice. *Conservation Letters*, 5(4), 245–255. <https://doi.org/10.1111/j.1755-263X.2012.00238.x>
- Baker, S. E., Cain, R., Van Kesteren, F., Zommers, Z. A., D'Cruze, N., & Macdonald, D. W. (2013). Rough trade: Animal welfare in the global wildlife trade. *Bioscience*, 63(12), 928–938. <https://doi.org/10.1525/bio.2013.63.12.6>
- Barbier, E. B., Burgess, J. C., Swanson, T. M., & Pearce, D. W. (1990). *Elephants, economics and ivory*. Earthscan.
- Bauer, H., Nowell, K., Sillero-Zubiri, C., & Macdonald, D. W. (2018). Lions in the modern arena of CITES. *Conservation Letters*, 11(5), e12444. <https://doi.org/10.1111/conl.12444>
- Béland, D. (2009). Ideas, institutions, and policy change. *Journal of European Public Policy*, 16(5), 701–718. <https://doi.org/10.1080/13501760902983382>
- Béland, D. (2019). Narrative stories, institutional rules, and the politics of pension policy in Canada and the United States. *Policy and Society*, 38(3), 356–372. <https://doi.org/10.1080/14494035.2019.1644071>
- Bennett, N. J., Roth, R., Klain, S. C., Chan, K., Christie, P., Clark, D. A., Cullman, G., Curran, D., Durbin, T. J., Epstein, G., Greenberg, A., Nelson, M. P., Sandlos, J., Stedman, R., Teel, T. L., Thomas, R., Verissimo, D., & Wyborn, C. (2017). Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation*, 205, 93–108. <https://doi.org/10.1016/j.biocon.2016.10.006>
- Biggs, D., Holden, M. H., Brackowski, A., Cook, C. N., Milner-Gulland, E. J., Phelps, J., Scholes, R. J., Smith, R. J., Underwood, F. M., Adams, V. M., Allan, J., Brink, H., Cooney, R., Gao, Y., Hutton, J., Macdonald-Madden, E., Maron, M., Redford, K. H., Sutherland, W. J., & Possingham, H. P. (2017). Breaking the deadlock on ivory. *Science*, 358(6369), 1378–1381. <https://doi.org/10.1126/science.aan5215>
- Bonner, R. (1993). *At the hand of man: Peril and Hope for Africa's wildlife*. Alfred A. Knopf.
- Bowman, M. (1998). Conflict or compatibility? The trade, conservation and animal welfare dimensions of cites. *Journal of International Wildlife Law & Policy*, 1(1), 9–63. <https://doi.org/10.1080/13880299809353883>
- Bowman, M. (2013). A tale of two CITES: Divergent perspectives upon the effectiveness of the wildlife trade convention. *Review of European, Comparative & International Environmental Law*, 22(3), 228–238. <https://doi.org/10.1111/reel.12049>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. In P. Liamputtong (Ed.), *Handbook of research methods in health social sciences* (pp. 843–860). Springer. https://doi.org/10.1007/978-981-10-5251-4_103
- Brockington, D., & Duffy, R. (2011). *Capitalism and conservation*. John Wiley & Sons.
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and Practice*, 2(1), 14. <https://doi.org/10.1186/s42466-020-00059-z>

- Callicott, J. B. (1990). Whither conservation ethics? *Conservation Biology*, 4(1), 15–20. <https://doi.org/10.1111/j.1523-1739.1990.tb00261.x>
- Campbell, J. L. (1998). Institutional analysis and the role of ideas in political economy. *Theory and Society*, 27(3), 377–409. <https://doi.org/10.1023/A:1006871114987>
- Campbell, J. L. (2004). *Institutional change and globalization*. Princeton University Press.
- Carstensen, M. B. (2015). Conceptualising ideational novelty: A relational approach: Conceptualising ideational novelty. *The British Journal of Politics & International Relations*, 17(2), 284–297. <https://doi.org/10.1111/1467-856X.12030>
- Carstensen, M. B., & Schmidt, V. A. (2016). Power through, over and in ideas: Conceptualizing ideational power in discursive institutionalism. *Journal of European Public Policy*, 23(3), 318–337. <https://doi.org/10.1080/13501763.2015.1115534>
- Challender, D. W. S., & MacMillan, D. C. (2014). Poaching is more than an enforcement problem. *Conservation Letters*, 7(5), 484–494. <https://doi.org/10.1111/conl.12082>
- Challender, D. W. S., & MacMillan, D. C. (2019). Investigating the influence of non-state actors on amendments to the CITES appendices. *Journal of International Wildlife Law & Policy*, 22(2), 90–114. <https://doi.org/10.1080/13880292.2019.1638549>
- Chen, F., & 't Sas-Rolfes, M. (2021). Theoretical analysis of a simple permit system for selling synthetic wildlife goods. *Ecological Economics*, 180, 106873. <https://doi.org/10.1016/j.ecolecon.2020.106873>
- Child, B., Musengezi, J., Parent, G. D., & Child, G. F. T. (2012). The economics and institutional economics of wildlife on private land in Africa. *Pastoralism: Research, Policy and Practice*, 2(1), 18. <https://doi.org/10.1186/2041-7136-2-18>
- CITES. (1973). CITES CoP1 E01 – Opening speeches. <https://cites.org/sites/default/files/eng/cop/01/E01-Opening-speeches.pdf>
- CITES. (2019a). *Eighteenth meeting of the Conference of the Parties: Summary record of the fourth session for Committee I, 19 August 2019: 14h05–16h50*. https://cites.org/sites/default/files/eng/cop/18/Com_I/SR/E-CoP18-Com-I-Rec-04-R1.pdf
- CITES. (2019b). *Eighteenth meeting of the Conference of the Parties: Summary record of the second plenary session, 27 August 2019: 09h15–11h30*. <https://cites.org/sites/default/files/eng/cop/18/Plen/SR/E-CoP18-Plen-Rec-02-R2.pdf>
- Clements, H. S., Knight, M., Jones, P., & Balfour, D. (2020). Private rhino conservation: Diverse strategies adopted in response to the poaching crisis. *Conservation Letters*, 13(6), e12741. <https://doi.org/10.1111/conl.12741>
- Cooney, R., Kasterine, A., MacMillan, D., Milledge, S., Nossal, K., Roe, D., & 't Sas-Rolfes, M. (2015). *The trade in wildlife: A framework to improve biodiversity and livelihood outcomes*. International Trade Centre. [http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/2014-2015-76_Low%20Res%20PDF_Trade%20in%20Wildlife\(4\).pdf](http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/2014-2015-76_Low%20Res%20PDF_Trade%20in%20Wildlife(4).pdf)
- Couzens, E. (2013). CITES at forty: Never too late to make life-style changes. *Review of European, Comparative & International Environmental Law*, 22(3), 311–323.
- Czarniawska, B. (2004). *Narratives in social science research* (1st ed.). Sage Publications Ltd.
- D'Cruze, N., Green, J., Elwin, A., & Schmidt-Burbach, J. (2020). Trading tactics: Time to rethink the global trade in wildlife. *Animals*, 10(12), 2456. <https://doi.org/10.3390/ani10122456>
- DeWalt, K. M., & DeWalt, B. R. (2010). *Participant observation: A guide for fieldworkers* (2nd ed.). AltaMira Press.
- DFFE/South African Department of Forestry, Fisheries, and the Environment. (2016). *South Africa's position on a motion to terminate the hunting of captive-bred lions and other predators*. https://www.environment.gov.za/mediarelease/SA%25E2%580%2599sposition_totermiante_huntingcaptivebredlions
- DFFE/South African Department of Forestry, Fisheries, and the Environment. (2020a). *High-level panel report—For submission to the minister of environment, forestry and fisheries*. https://www.environment.gov.za/sites/default/files/reports/2020-12-22_high-level_panel_report.pdf
- DFFE/South African Department of Forestry, Fisheries, and the Environment. (2020b). *Department of Environmental Affairs: Notice 221 of 2020*. Government Gazette: Republic of South Africa.
- Di Minin, E., Clements, H. S., Correia, R. A., Cortés-Capano, G., Fink, C., Haukka, A., Hausmann, A., Kulkarni, R., & Bradshaw, C. J. A. (2021). Consequences of recreational hunting for biodiversity conservation and livelihoods. *One Earth*, 4(2), 238–253. <https://doi.org/10.1016/j.oneear.2021.01.014>
- Dickson, B. (1999). The precautionary principle in CITES: A critical assessment. *Natural Resources Journal*, 39(2), 211–228.
- Do, Q.-T., Levchenko, A. A., Ma, L., Blanc, J., Dublin, H., & Milliken, T. (2020). The price elasticity of African elephant poaching. *The World Bank Economic Review*, lhaa008. <https://doi.org/10.1093/wber/lhaa008>
- Doak, D. F., Bakker, V. J., Goldstein, B. E., & Hale, B. (2014). What is the future of conservation? *Trends in Ecology & Evolution*, 29(2), 77–81.
- Douglas-Hamilton, I., & Douglas-Hamilton, O. (1993). *Battle for the elephants by Iain Douglas-Hamilton*. Doubleday.
- Duffy, R. (2013). Global environmental governance and north–South dynamics: The case of the cites. *Environment and Planning. C, Government & Policy*, 31(2), 222–239. <https://doi.org/10.1068/c1105>
- Duffy, R. (2022). *Security and conservation: The politics of the illegal wildlife trade*. Yale University Press.
- Duffy, R., Massé, F., Smidt, E., Marijnen, E., Büscher, B., Verweijen, J., Ramutsindela, M., Simlai, T., Joanny, L., & Lunstrum, E. (2019). Why we must question the militarisation of conservation. *Biological Conservation*, 232, 66–73. <https://doi.org/10.1016/j.biocon.2019.01.013>
- Epstein, C. (2006). The making of global environmental norms: Endangered species protection. *Global Environmental Politics*, 6(2), 32–54. <https://doi.org/10.1162/glep.2006.6.2.32>
- Farah, N., & Boyce, J. R. (2019). Elephants and mammoths: The effect of an imperfect legal substitute on illegal activity. *Environment and Development Economics*, 24, 225–251. <https://doi.org/10.1017/S1355770X18000554>
- Favre, D. (1993). Debate within the CITES community: What direction for the future. *Natural Resources Journal*, 33, 875–918.
- Fischer, C. (2010). Does trade help or hinder the conservation of natural resources? *Review of Environmental Economics and Policy*, 4(1), 103–121. <https://doi.org/10.1093/reep/rep023>
- Frank, E. G., & Wilcove, D. S. (2019). Long delays in banning trade in threatened species. *Science*, 363(6428), 686–688. <https://doi.org/10.1126/science.aav4013>
- Friedman, K., Braccini, M., Bjerregaard-Walsh, M., Bonfil, R., Bradshaw, C. J. A., Brouwer, S., Campbell, I., Coelho, R., Cortés, E., Dimmlich, W., Frisk, M. G., Kingma, I., McCully Phillips, S. R., O'Criodain, C., Parker, D., Shephard, S., Tovar-Ávila, J., & Yokawa, K. (2020). Informing CITES Parties: Strengthening science-based decision-making when listing marine species. *Fish and Fisheries*, 21(1), 13–31. <https://doi.org/10.1111/faf.12411>
- Fusch, P., & Ness, L. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408–1416. <https://doi.org/10.46743/2160-3715/2015.2281>
- Gaffney, A. C. B., & Evensen, D. (2019). Addressing the elephant in the room: Learning from CITES CoP17. *Global Environmental Politics*, 20(1), 3–10. https://doi.org/10.1162/glep_a_00537
- Gehring, T., & Ruffing, E. (2008). When arguments prevail over power: The CITES procedure for the listing of endangered species. *Global Environmental Politics*, 8(2), 123–148.
- Geist, V. (1994). Wildlife conservation as wealth. *Nature*, 368(6471), 491–492. <https://doi.org/10.1038/368491a0>
- Goho, S. A. (2001). The Cites Fort Lauderdale Criteria: The uses and limits of science in international conservation Decisionmaking. *Harvard Law Review*, 114(6), 1769.

- Greene, J. D. (2014). Beyond point-and-shoot morality: Why cognitive (neuro)science matters for ethics. *Ethics*, 124(4), 695–726. <https://doi.org/10.1086/675875>
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108(4), 814–834. <https://doi.org/10.1037/0033-295x.108.4.814>
- Haidt, J. (2008). Morality. *Perspectives on Psychological Science*, 3(1), 65–72.
- Hall, P. A., & Taylor, R. C. R. (1996). Political science and the three new institutionalisms. *Political Studies*, 44(5), 936–957. <https://doi.org/10.1111/j.1467-9248.1996.tb00343.x>
- Hart, A. G., Cooney, R., Dickman, A., Hare, D., Jonga, C., Johnson, P. K., Louis, M. P., Lubilo, R., Roe, D., Semcer, C., & Somerville, K. (2020). Threats posed to conservation by media misinformation. *Conservation Biology*, 34(6), 1333–1334. <https://doi.org/10.1111/cobi.13605>
- Heim, J., & Böcher, M. (2016). CITES and science: Using the RIU model to analyze institutionalized scientific policy advice in Germany for the case of ivory trade. *Journal of International Wildlife Law & Policy*, 19(2), 159–175. <https://doi.org/10.1080/13880292.2016.1167475>
- Hinsley, A., & 't Sas-Rolfes, M. (2020). Wild assumptions? Questioning simplistic narratives about consumer preferences for wildlife products. *People and Nature*, 2(4), 972–979. <https://doi.org/10.1002/pan3.10099>
- Hodgson, G. M. (2006). What are institutions? *Journal of Economic Issues*, 40(1), 1–25. <https://doi.org/10.1080/00213624.2006.11506879>
- Hoyt, J. A. (1994). *Animals in peril: How 'sustainable use' is wiping out the world's wildlife*. Avery.
- Hutton, J., Adams, W. M., & Murombedzi, J. C. (2005). Back to the barriers? Changing narratives in biodiversity conservation. *Forum for Development Studies*, 32(2), 341–370. <https://doi.org/10.1080/08039410.2005.9666319>
- Hutton, J. M., & Leader-Williams, N. (2003). Sustainable use and incentive-driven conservation: Realigning human and conservation interests. *Oryx*, 37(2), 215–226. <https://doi.org/10.1017/S0030605303000395>
- IPBES. (2019). *Global assessment report on biodiversity and ecosystem services of the intergovernmental science-policy platform on biodiversity and ecosystem services* (E. S. Brondizio, J. Settele, S. Díaz, & H. T. Ngo, Eds.). IPBES secretariat. <https://doi.org/10.5281/zenodo.3553579>
- IUCN. (2019). *IUCN sets the record straight on a 2017 trophy hunting opinion*. <https://www.iucn.org/news/secretariat/201910/iucn-sets-record-straight-a-2017-trophy-hunting-opinion>
- Jepson, P. (2018). Recoverable Earth: A twenty-first century environmental narrative. *Ambio*, 1–8, 123–130. <https://doi.org/10.1007/s13280-018-1065-4>
- Jones, M., McBeth, M., & Shanahan, E. (2014). Introducing the Narrative Policy Framework. In M. Jones, E. Shanahan, & M. McBeth (Eds.), *The science of stories: Applications of the Narrative Policy Framework in public policy analysis* (1st ed., pp. 1–25). Palgrave Macmillan.
- Kahan, D. M., Peters, E., Wittlin, M., Slovic, P., Ouellette, L. L., Braman, D., & Mandel, G. (2012). The polarizing impact of science literacy and numeracy on perceived climate change risks. *Nature Climate Change*, 2(10), 732–735. <https://doi.org/10.1038/nclimate1547>
- Karesh, W. B., Cook, R. A., Bennett, E. L., & Newcomb, J. (2005). Wildlife trade and global disease emergence. *Emerging Infectious Diseases*, 11(7), 1000–1002. <https://doi.org/10.3201/eid1107.050194>
- Kawulich, B. B. (2005). Participant observation as a data collection method. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 6(2). <https://doi.org/10.17169/fqs-6.2.466>
- Kosloff, L. H., & Trexler, M. C. (1987). The convention on international trade in endangered species: Enforcement theory and practice in the United States. *Boston University International Law Journal*, 5(2), 327–362.
- Kriebel, D., Tickner, J., Epstein, P., Lemons, J., Levins, R., Loechler, E. L., Quinn, M., Rudel, R., Schettler, T., & Stoto, M. (2001). The precautionary principle in environmental science. *Environmental Health Perspectives*, 109(9), 871–876. <https://doi.org/10.2307/3454986>
- Kriepps, C. (1996). Sustainable use of endangered species under CITES: Is it a sustainable alternative? *University of Pennsylvania Journal of International Law*, 17(1), 461.
- Kuiper, T., Altwegg, R., Beale, C., Carroll, T., Dublin, H. T., Hauenstein, S., Kshatriya, M., Schwarz, C., Thouless, C. R., Royle, A., & Milner-Gulland, E. J. (2023). Drivers and facilitators of the illegal killing of elephants across 64 African sites. *Proceedings of the Royal Society B: Biological Sciences*, 290(1990), 20222270. <https://doi.org/10.1098/rspb.2022.2270>
- Lemos, M. C., & Agrawal, A. (2006). Environmental governance. *Annual Review of Environment and Resources*, 31(1), 297–325. <https://doi.org/10.1146/annurev.energy.31.042605.135621>
- Lindsey, P., Allan, J., Brehony, P., Dickman, A., Robson, A., Begg, C., Bhammar, H., Blanken, L., Breuer, T., Fitzgerald, K., Flyman, M., Gandiwa, P., Giva, N., Kaelo, D., Nampindo, S., Nyambe, N., Steiner, K., Parker, A., Roe, D., ... Tyrrell, P. (2020). Conserving Africa's wildlife and wildlands through the COVID-19 crisis and beyond. *Nature Ecology & Evolution*, 1–11, 1300–1310. <https://doi.org/10.1038/s41559-020-1275-6>
- Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37(11), 2098–2109. <https://doi.org/10.1037/0022-3514.37.11.2098>
- Ludwig, D., Hilborn, R., & Waters, C. (1993). Uncertainty, resource exploitation, and conservation: Lessons from history. *Science*, 260(5104), 17–36.
- Macdonald, D. W., Harrington, L. A., Moorhouse, T. P., & D'Cruze, N. (2021). Trading animal lives: Ten tricky issues on the road to protecting commodified wild animals. *Bioscience*, 71, 846–860. <https://doi.org/10.1093/biosci/biab035>
- March, J. G., & Olsen, J. P. (1983). The new institutionalism: Organizational factors in political life. *American Political Science Review*, 78(3), 734–749. <https://doi.org/10.2307/1961840>
- Massé, F., Dickinson, H., Margulies, J., Joanny, L., Lappe-Osthege, T., & Duffy, R. (2020). Conservation and crime convergence? Situating the 2018 London illegal wildlife trade conference. *Journal of Political Ecology*, 27(1), 23–42. <https://doi.org/10.2458/v27i1.23543>
- Massé, F., & Margulies, J. D. (2020). The geopolitical ecology of conservation: The emergence of illegal wildlife trade as national security interest and the re-shaping of US foreign conservation assistance. *World Development*, 132, 104958. <https://doi.org/10.1016/j.worlddev.2020.104958>
- Masters, R. D. (1982). Is sociobiology reactionary? The political implications of inclusive-fitness theory. *The Quarterly Review of Biology*, 57(3), 275–292.
- Milner-Gulland, E. J. (2018). Documenting and tackling the illegal wildlife trade: Change and continuity over 40 years. *Oryx*, 52(4), 597–598. <https://doi.org/10.1017/S0030605318001047>
- Minteer, B. (2011). *Refounding environmental ethics: Pragmatism, principle, and practice*. Temple University Press.
- Nadelmann, E. A. (1990). Global prohibition regimes: The evolution of norms in international society. *International Organization*, 44(4), 479–526.
- Naidoo, R., Weaver, L. C., Diggie, R. W., Matongo, G., Stuart-Hill, G., & Thouless, C. (2016). Complementary benefits of tourism and hunting to communal conservancies in Namibia. *Conservation Biology*, 30(3), 628–638. <https://doi.org/10.1111/cobi.12643>

Natusch, D. J. D., Aust, P. W., & Shine, R. (2021). The perils of flawed science in wildlife trade literature. *Conservation Biology*, 35(5), 1396–1404. <https://doi.org/10.1111/cobi.13716>

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

Norton, B. G. (1986). Conservation and preservation: A conceptual rehabilitation. *Environmental Ethics*, 8(3), 195–220. <https://doi.org/10.5840/enviroethics1986832>

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.

Pascual, U., Adams, W. M., Díaz, S., Lele, S., Mace, G. M., & Turnhout, E. (2021). Biodiversity and the challenge of pluralism. *Nature Sustainability*, 1–6, 567–572. <https://doi.org/10.1038/s41893-021-00694-7>

Pinker, S. (2002). *The blank slate: The modern denial of human nature*. Viking.

Poole, J. H., & Thomsen, J. B. (1989). Elephant are not beetles: Implications of the ivory trade for the survival of the African elephant. *Oryx*, 23(4), 188–198. <https://doi.org/10.1017/S0030605300023012>

Princen, T. (1994). The ivory trade ban: NGOs and international conservation. In T. Princen & M. Finger (Eds.), *Environmental NGOs in world politics: Linking the local and the global* (pp. 121–159). Routledge.

Princen, T., & Finger, M. (1994). *Environmental NGOs in world politics: Linking the local and the global*. Routledge.

Ramp, D., & Bekoff, M. (2015). Compassion as a practical and evolved ethic for conservation. *Bioscience*, 65(3), 323–327. <https://doi.org/10.1093/biosci/biu223>

Redpath, S. M., Gutiérrez, R. J., Wood, K. A., & Young, J. C. (Eds.). (2015). *Conflicts in conservation: Navigating towards solutions* (Illustrated ed.). Cambridge University Press.

Redpath, S. M., Young, J., Evelyn, A., Adams, W. M., Sutherland, W. J., Whitehouse, A., Amar, A., Lambert, R. A., Linnell, J. D. C., Watt, A., & Gutiérrez, R. J. (2013). Understanding and managing conservation conflicts. *Trends in Ecology & Evolution*, 28(2), 100–109. <https://doi.org/10.1016/j.tree.2012.08.021>

Ripple, W. J., Chapron, G., López-Bao, J. V., Durant, S. M., Macdonald, D. W., Lindsey, P. A., Bennett, E. L., Beschta, R. L., Bruskotter, J. T., Campos-Arceiz, A., Corlett, R. T., Darimont, C. T., Dickman, A. J., Dirzo, R., Dublin, H. T., Estes, J. A., Everatt, K. T., Galetti, M., Goswami, V. R., ... Zhang, L. (2016). Saving the world's terrestrial megafauna. *Bioscience*, 66(10), 807–812. <https://doi.org/10.1093/biosci/biw092>

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155–169. <https://doi.org/10.1007/BF01405730>

Rivalan, P., Delmas, V., Angulo, E., Bull, L. S., Hall, R. J., Courchamp, F., Rosser, A. M., & Leader-Williams, N. (2007). Can bans stimulate wildlife trade? *Nature*, 447(7144), 529–530. <https://doi.org/10.1038/447529a>

Robinson, J. G. (2011). Ethical pluralism, pragmatism, and sustainability in conservation practice. *Biological Conservation*, 144(3), 958–965. <https://doi.org/10.1016/j.biocon.2010.04.017>

Roe, D., & Lee, T. M. (2021). Possible negative consequences of a wildlife trade ban. *Nature Sustainability*, 4(1), 5–6. <https://doi.org/10.1038/s41893-020-00676-1>

Roe, E. (1994). *Narrative policy analysis: Theory and practice*. Duke University Press. <https://doi.org/10.1215/9780822381891>

Sand, P. H. (1997). Whither CITES—The evolution of a treaty regime in the borderland of trade and environment. *European Journal of International Law*, 8(1), 29–58.

Sandbrook, C., Scales, I. R., Vira, B., & Adams, W. M. (2011). Value pluralism among conservation professionals. *Conservation Biology*, 25(2), 285–294. <https://doi.org/10.1111/j.1523-1739.2010.01592.x>

Schlossberg, S., Chase, M. J., Gobush, K. S., Wasser, S. K., & Lindsay, K. (2020). State-space models reveal a continuing elephant poaching problem in most of Africa. *Scientific Reports*, 10(1), 10166. <https://doi.org/10.1038/s41598-020-66906-w>

Schmidt, V. A. (2008). Discursive institutionalism: The explanatory power of ideas and discourse. *Annual Review of Political Science*, 11(1), 303–326. <https://doi.org/10.1146/annurev.polisci.11.060606.135342>

Schrad, M. L. (2010). *The political power of bad ideas: Networks, institutions, and the global prohibition wave*. Oxford University Press.

Sekar, N., Clark, W., Dobson, A., Coelho, P. C. F., Hannam, P. M., Hepworth, R., Hsiang, S., Kahumbu, P., Lee, P. C., Lindsay, K., Pereira, C. L., Wasser, S. K., & Nowak, K. (2018). Ivory crisis: Growing no-trade consensus. *Science*, 360(6386), 276. <https://doi.org/10.1126/science.aat1105>

Shanahan, E. A., Jones, M. D., & McBeth, M. K. (2011). Policy narratives and policy processes. *Policy Studies Journal*, 39(3), 535–561. <https://doi.org/10.1111/j.1541-0072.2011.00420.x>

Shanahan, E. A., Jones, M. D., McBeth, M. K., & Radaelli, C. M. (2017). The Narrative Policy Framework. In C. M. Weible & P. A. Sabatier (Eds.), *Theories of the policy process* (4th ed., pp. 173–213). Routledge.

Slovic, P. (1987). Perception of risk. *Science*, 236(4799), 280–285. <https://doi.org/10.1126/science.3563507>

Smith, K. F., Behrens, M., Schloegel, L. M., Marano, N., Burgiel, S., & Daszak, P. (2009). Reducing the risks of the wildlife trade. *Science*, 324(5927), 594–595. <https://doi.org/10.1126/science.1174460>

Somerville, K. (2017). *Ivory: Power and poaching in Africa* (1st ed.). Hurst.

Sowell, T. (1987). *A conflict of visions: Ideological origins of political struggles*. William Morrow.

Srivastava, P., & Hopwood, N. (2009). A practical iterative framework for qualitative data analysis. *International Journal of Qualitative Methods*, 8(1), 76–84. <https://doi.org/10.1177/160940690900800107>

Stoddard, E. (2017, April 5). South Africa's top court lifts ban on domestic sales in rhino horn. *Reuters*. <https://www.reuters.com/article/us-wildlife-rhinos-safrica-idUSKBN1771VP>

Stoett, P. (2002). The international regulation of trade in wildlife: Institutional and normative considerations. *International Environmental Agreements*, 2(2), 193–208. <https://doi.org/10.1023/A:1020942110468>

Stuart, S. N., Al Dhaheri, S., Bennett, E. L., Biggs, D., Bignell, A., Byers, O., Cooney, R., Donaldson, J., Dublin, H. T., Eggermont, H., Engels, B., van Havre, B., Hoffmann, M., Horie, M., Hutton, J., Khosla, A., Launay, F., Lees, C., Mace, G. M., ... von Weissenberg, M. (2019). IUCN's encounter with 007: Safeguarding consensus for conservation. *Oryx*, 53(4), 741–747. <https://doi.org/10.1017/S0030605317001557>

Sugg, I. C., & Kreuter, U. P. (1994). *Elephants and ivory: Lessons from the trade ban*. Institute of Economic Affairs.

Swanson, T., Bolton, P., & Manning, A. (1993). Regulating endangered species. *Economic Policy*, 8(16), 185–205. <https://doi.org/10.2307/1344571>

Swanson, T. M. (1996). International regulation for environmental protection: Learning from CITES. *Economic Affairs*, 16(5), 8–16. <https://doi.org/10.1111/j.1468-0270.1996.tb00562.x>

't Sas-Rolfes, M. (2017). African wildlife conservation and the evolution of hunting institutions. *Environmental Research Letters*, 12(11), 115007.

't Sas-Rolfes, M., Challender, D. W. S., Hinsley, A., Veríssimo, D., & Milner-Gulland, E. J. (2019). Illegal wildlife trade: Scale, processes, and governance. *Annual Review of Environment and Resources*, 44(1), 201–228. <https://doi.org/10.1146/annurev-environ-101718-033253>

't Sas-Rolfes, M., & Hiller, C. (2021). Literature review: Assessment of the impact of trade restrictions and other policies on wildlife conservation and community wildlife stewardship in southern Africa. USAID. <https://doi.org/10.13140/RG.2.2.21779.28965>

't Sas-Rolfes, M., Moyle, B., & Stiles, D. (2014). The complex policy issue of elephant ivory stockpile management. *Pachyderm*, 55, 62–77.

- Thompson, C. (2004). Co-producing CITES and the African elephant. In S. Jasanoff (Ed.), *States of knowledge: The co-production of science and the social order* (1st ed., pp. 67–86). Routledge.
- Velázquez Gomar, J. O., & Stringer, L. C. (2011). Moving towards sustainability? An analysis of CITES' conservation policies. *Environmental Policy and Governance*, 21(4), 240–258. <https://doi.org/10.1002/eet.577>
- Venturini, T. (2010). Diving in magma: How to explore controversies with actor-network theory. *Public Understanding of Science*, 19(3), 258–273. <https://doi.org/10.1177/0963662509102694>
- Weible, C. M., & Sabatier, P. A. (2017). *Theories of the policy process* (4th ed.). Routledge.
- Williams, V. L., & 't Sas-Rolfes, M. J. (2019). Born captive: A survey of the lion breeding, keeping and hunting industries in South Africa. *PLoS One*, 14(5), e0217409. <https://doi.org/10.1371/journal.pone.0217409>

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Supplementary Material.

How to cite this article: 't Sas-Rolfes, M., & Gooden, J. (2024). A conflict of visions: Ideas shaping wildlife trade policy toward African megafauna. *People and Nature*, 00, 1–17. <https://doi.org/10.1002/pan3.10705>