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Biodiversity conservation cannot afford COVID-19 communication bungles

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With COVID-19 (coronavirus disease 2019) dominating headlines, highlighting links between the pandemic and biodiversity may increase public awareness of the biodiversity crisis. However, ill-considered messages that frame nature as the problem rather than the solution could inadvertently propagate problematic narratives and undermine motivations and individual self-efficacy to conserve nature.

Narratives of nature and COVID-19

With COVID-19 recently dominating media headlines, other ongoing global crises, such as biodiversity loss, have struggled to compete for attention. In response, conservationists have used new communication tactics, including **framing** (see [Glossary](#)) stories in ways that draw connections between COVID-19 and nature. However, not all publicity is good publicity; while this strategy aims to make nature stories topical, it risks reinforcing old **narratives** that frame nature as a threat to humanity. Consequently, it may inadvertently suppress the appetite of the global community to take action to protect, conserve, and bring back biodiversity, rather than provide the stimulant intended.

One poignant example is a tweet from the Twitter account of the Intergovernmental Science-Policy Platform on Biodiversity

and Ecosystem Services (IPBES), highlighting findings of their Workshop Report on Biodiversity and Pandemics [1]: ‘There are 1.7 million undiscovered viruses lurking in mammals and birds, half of which may have the ability to affect people’ (IPBES Twitter, November 19, 2020; 343 likes, 218 retweets at time of publication)[†].

The full report details the complex relationships between human behaviour, nature, and the rise of pandemics [1], but with low click-through rates from social media posts (e.g., 1.3%ⁱⁱ), few of the Twitter audience (77,800 followers at time of publication) would have followed through to read these nuances. Instead, most received only the message of ‘1.7 million undiscovered viruses lurking’ in wildlife. Statistics emphasising the prevalence of viruses in nature were front and centre of the IPBES’ report media releaseⁱⁱⁱ (including the by-line itself, which states ‘631,000 – 827,000 unknown viruses in nature could still infect people’), suggesting a strategic choice to frame the issue in this way. The many media articles about the report^{iv} suggest that this framing successfully garnered media interest. Yet, it also risks generating a problematic connection between COVID-19 and nature; that of nature as a threat to human health.

Other organisations have highlighted connections between nature’s decline and the pandemic to raise awareness about the biodiversity and climate crises (e.g., UN Environmental Chief in *The Guardian*^v). Yet, while the connections may be legitimate, these messages can backfire without a fully considered messaging strategy. For example, attempts to counteract negative perceptions of bats may have reinforced negative links between wildlife and disease [2,3], and communications framing the COVID-19 economic crisis as a ‘trial run’ for climate action may not increase support for mitigation strategies as hoped [4]. By taking a strategic communications approach (Figure 1) and drawing on pre-

Glossary

Framing: the way an issue is described or how a problem is conceived, articulated, and approached. Framing can be identified or defined at different scales, from semantic framing (e.g., referring to wildlife as ‘biodiversity’ versus ‘nature’), to the framing of entire issues (e.g., framing biodiversity conservation as a sustainability issue, an environmental justice issue, or a ‘caring for nature’ issue [8]). These different frames can result in different interpretations of what is the problem and solution, and which ‘characters’ or ‘objects’ are relevant to the issue, and which are not.

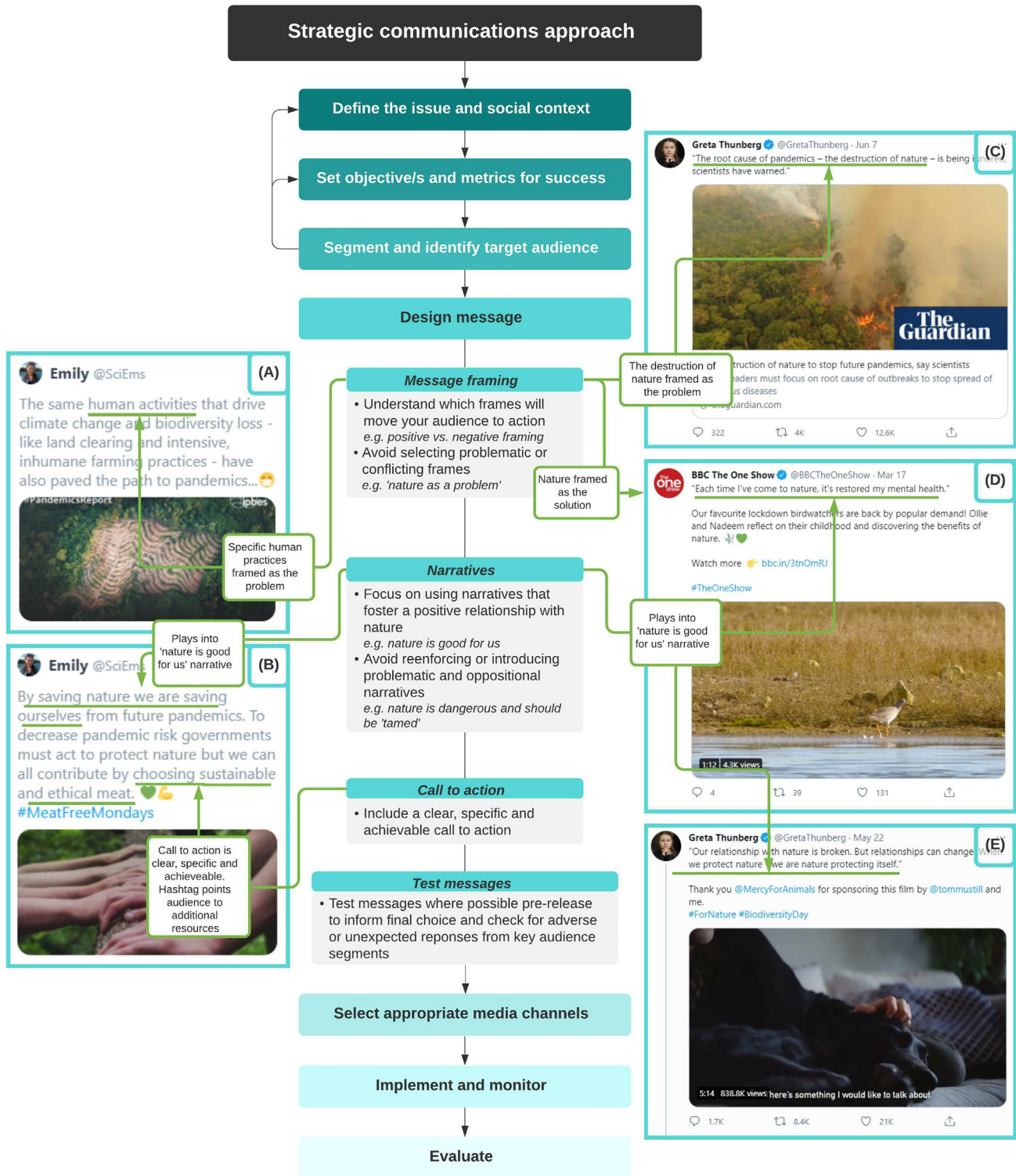
Narrative: a story that links particular facts, evidence, and events in a consistent way that helps us to create meaning and understanding. Different narratives can generate alternative representations of the same objective ‘reality’.

Self-efficacy: the self-perceived ability of an individual to engage in a specific behaviour, or how empowered they feel to carry out the action. Self-efficacy can be influenced by how difficult the individual perceives the action to be (i.e., efficacy), and belief in the effectiveness of the action itself (i.e., response efficacy).

established messaging evidence (e.g., see literature cited herein and online^{vi,vi}), conservation professionals can work to avoid such pitfalls. Here, we focus on the message design stage of the strategic communications process. Specifically, we focus on message framing, narratives, and calls to action to provide guidance on how to craft messages about nature and COVID-19 that will increase support for conservation policies.

Framing nature as a solution, not a problem

Message frames influence how an audience perceives a problem and what they consider to be desirable solutions [5]. Messages linking COVID-19 and nature can inadvertently evoke frames that cast nature as the problem. Some frame nature as a host for viruses (see earlier), while others focus on animal vectors as the source of COVID-19, rather than human practices, such as wildlife trading, land clearing, and intensive meat production, which have changed the ways in which we interact with these animals (Figure 1A,C). In addition to framing nature as the problem, such message frames perpetuate



outdated and problematic colonial narratives of humans as separate from nature and ‘taming’ nature [6,7]. These frames and narratives can be evoked in a message even when contrary to the original source or intention, as evidenced by the framing of the IPBES tweet described earlier, which does not reflect the general findings of the report [1].

To avoid such missteps, conservation professionals must consider how different messages emphasise different value systems [8], influence risk perceptions, and affect dominant social narratives, all of which shape society’s willingness to act [9]. For example, recent research shows that narratives framing the pandemic as caused by both animals and humans (as opposed to only animals or only humans) were most effective at eliciting proconservation policy support, particularly around the wildlife trade [10]. While results may vary across different contexts, such research illustrates the influence of framing and narratives on perceptions around COVID-19 and nature.

Alternative frames linking COVID-19 and nature exist. Narratives of ‘nature in the time of COVID’, which frame nature as a part of the solution, have emerged among traditional news and social media platforms over the past year^{viii,ix}. Stories that frame nature as a source of wellbeing and health have become topical as populations find themselves in lockdown or their movement restricted to local green spaces (Figure 1D). These stories foster a narrative that ‘nature is good for us’, counteracting ideas that ‘nature is scary

and dangerous’. This narrative is integral to current efforts to enhance nature in cities and underpins the growing recognition that people depend on nature [11].

Promoting self-efficacy and action, not apathy

Messages highlighting the number of viruses in nature have a similar role to oft-quoted statistics around accelerating extinction rates or habitat loss, the usual purpose of which is to heighten the audience’s sense of urgency and risk, and evoke concern, panic, or fear. Yet, triggering these negative emotions without providing guidance for the audience about solutions rarely promotes action [12]. Instead, such messaging runs the risk of overwhelming and disengaging the audience. While messages that inspire hope can increase the likelihood of action, they can also lead to apathy by reducing the perceived risk [12]. A middle ground is needed. Climate change communications research has shown that pairing fear-inducing messages with an achievable and efficacious call to action can overcome the associated risks by enhancing **self-efficacy** [13]. Yet, few messages linking COVID-19 and nature communicate a clear action or solution, leaving readers with little guidance about what to do with the troubling information presented. The social media quote cards provided by the IPBES^x describe vague, high-level, and largely unactionable solutions for the typical reader, including a ‘greater focus on prevention’, ‘reducing anthropogenic global environmental change’, ‘transformative change’, or establishing an intergovernmental pandemic prevention council. To

promote citizen engagement and action, suggestions for actions that can be implemented by individuals are necessary to enhance self-efficacy and empower individuals to act in desirable ways for both global public health and biodiversity benefits. Examples of such actions, drawn from the IPBES report, include reducing consumption of intensively farmed meat and products from wildlife trade [1] (Figure 1B). Enhancing individual self-efficacy is also critical for increasing public pressure on organisations and political bodies with the power to enact the transformative systemic change required.

A strategic approach to messaging

As the conservation community increasingly seeks an audience through stakeholder engagement, messaging, and social marketing approaches [14], it is critical that this is done in a way that is effective for achieving desirable conservation outcomes. We applaud organisations such as the IPBES for actively seeking media coverage during the time of COVID-19, and acknowledge that critiquing another’s messaging strategy is easier than designing an effective alternative. In Figure 1, we present a range of alternative tweets; two manufactured tweets present an alternative narrative that reframes the link between nature and COVID-19 and provides a call to action (Figure 1A,B), and three bona fide tweets provide good examples of the concepts discussed herein (Figure 1C–E). These messages focus on framing human practices (rather than nature) as the problem, framing nature as the solution, reinforcing supportive narratives for conservation, and including clear calls to action. We do not mean to

Figure 1. Outline of a strategic communications approach with a focus on the message design phase. While outlined as a linear process, there are stages at which an iterative process is recommended, such as in the first three stages. Tweets are presented as preferred examples of message framing, narratives, and calls to action when discussing COVID-19 and nature: (A) Tweet created by authors, image by IPBES, (B) Tweet created by authors, image by Unsplash/Shane Rounce, (C) Greta Thunberg (<https://twitter.com/GretaThunberg/status/14018085333562273793?s=20>), (D) Greta Thunberg, (<https://twitter.com/GretaThunberg/status/1396058911325790208?s=20>), (E) BBC The One Show, (<https://twitter.com/BBCTheOneShow/status/1371908588025823233?s=20>). The communications approach is adapted from [15]. Abbreviation: COVID-19, coronavirus disease 2019; IPBES, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

suggest that these messages will necessarily be broadly effective across different audiences and contexts; organisations with capacity to engage in a comprehensive strategic communications planning process, including pre-testing, should do so^{xi}.

Messaging that makes a difference

A perfectly considered media campaign is a rare luxury. However, conservation professionals, particularly within large well-resourced organisations, can influence social discourse about, and support for, nature and conservation in both positive and negative ways. As conservation messaging moves beyond its foundational discussions (e.g., fear- versus hope-inducing messaging) and toward an important role in more complex and context-specific (i.e., wicked) problems, it is vital that this contribution is strategic and constructive, and draws on well-established communication theories and guidance.

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Declaration of interests

None declared by the authors.

Resources

- ⁱ<https://twitter.com/IPBES/status/1329339343840964608?s=20>
- ⁱⁱwww.statista.com/statistics/872099/social-media-advertising-ctr/
- ⁱⁱⁱ<https://ipbes.net/pandemics>
- ^{iv}<https://ipbes.net/media-watch>
- ^vwww.theguardian.com/world/2020/mar/25/coronavirus-nature-is-sending-us-a-message-says-un-environment-chief
- ^{vi}www.publicinterest.org.uk/FramingNatureToolkit.pdf
- ^{vii}www.frameworksinstitute.org/issues/climate-change-and-environment/
- ^{viii}<https://theconversation.com/heres-why-youre-craving-the-outdoors-so-much-during-the-coronavirus-lockdown-136375>
- ^{ix}www.bbc.co.uk/news/health-52479763
- ^x<https://bit.ly/PandemicsReportResources>
- ^{xi}<https://publicinterest.org.uk/TestingGuide.pdf>

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