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Wild animal populations are not “stocks”: Does language bias hamper conservation efforts by the International Whaling Commission?

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Wild animal populations are not “stocks”: Does language bias hamper conservation efforts by the International Whaling Commission?

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Abstract

The terminology used to govern our relations with wildlife and nature is often imprecise, euphemistic or tailored to human uses. Such terminology is frequently reflected in the policy statements, statutes and texts of management bodies. Many of the formalised viewpoints and programmatic missions were drafted decades ago. In the meantime, however, our knowledge about animal behaviour and cognition as well as ecosystems and how they function has made major leaps forward. Our perception of animal rights has also shifted considerably. Here, we propose to reconsider and modernise some of the most obsolete terminology. We choose the International Whaling Commission (IWC) as a case study for both entrenched concepts and positive trends. We examine terms such as “stock”, “take”, “harvest”, “bycatch”, and “removal”, and propose some alternatives. An effort to conform language to modern understanding and sensibilities might encourage other conventions, agencies and organisations to consider language bias that influences our connection to, understanding and protection of, the living world.

Introduction

The use of complex language is a key feature of humans. Nonetheless, no language is sufficiently differentiated to avoid misinterpretations, misunderstandings, and potential discord. On a semantic level, this is reflected by the fact that any word applied to an object, concept or action inherently reduces that entity to a limited spectrum of its potential overall features or, alternately, is a generalisation that encompasses a wide spectrum of meanings. In a sense, this entails a falsification, with every recipient of a word understanding it somewhat differently. Accordingly, words and statements can, willingly or unwillingly, fail to accurately convey some underlying truth.

On one hand, language, as a tool to linguistically represent the outside world, seeks precision and enlightenment. New terms are constantly being coined to describe phenomena 1) that were either previously unknown or non-existent (e.g., new technological advances), 2) the importance of which newly requires recognition by introducing a new term, or 3) the nuances of which call for terminological specifications or subcategories. In the environmental sciences, some of these points are exemplified by relatively new terms we consider fundamental today and that have often entered public discourse such as ‘ecosystem services’, ‘shifting baselines’, ‘sustainable use’ and ‘biodiversity’. Many were coined only a decade or two ago, and some continue to be hotly debated.

On the other hand, language may deliberately seek imprecision. This is reflected by an inherent need either to simplify reality, to mask true opinions, to introduce a bias or to render certain things less painful or disconcerting. The terms used in this way are sometimes referred to as “loaded language” (Klein and Hendler, 2022). This may involve avoiding direct insults, circumventing personal sensitivities, striving for political correctness, or using camouflaging “journalese”. At its worst, it can be purposefully manipulative, such as when euphemisms are used to mislead or deceive (“double speak”; Lutz, 1989) or when lobbyists apply terms that avoid an emotionalization of the public discourse that could run counter to the interests they represent. The aspiration can include obfuscating unpleasant or threatening situations and events or making them more palatable by creating friendlier or more neutral terms and euphemisms. The power of word choice is evident in the difficulties of achieving consensus texts in the final communiqués or other products in the policy-making or diplomatic arenas, where some parties seek unequivocal meaning while others may seek a certain ambiguity to keep a window open for future interpretations.

Both aspects of language addressed above are evident in how humans deal with the environment, more specifically in the realm of “managing” species and habitats. Here, we seek to spark a discussion about the use of terms that are ambiguous, unclear or misleading, or that view non-human animals from an exclusively utilitarian point of view. This effort is based on advances made in recent decades, including on animal behaviour and cognition, animal rights, as well as their ecosystem functions.

We choose the International Whaling Commission (IWC) as a case study. The IWC’s internationally recognized mandate, as specified in the Preamble of the International Convention for the Regulation of Whaling, is “*to provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry*” (<https://iwc.int/commission/history-and-purpose>). That mandate became a necessity after whaling had reduced many whale populations and species to near extirpation before much was known about their biology and ecology. Importantly, the mandate comprises the two potentially conflicting tasks of conservation and (whaling) management (Galletti Vernazzani et al. 2017). This dichotomy fostered the use of language designed to encompass both missions, conservation and management, also with respect to the public discourse. Many terms, however, tend to mask underlying truths, e.g., whales are being killed when they are said to be ‘taken’ or ‘harvested’. In being anchored in commercial, management or policy frameworks and parlance, such terms tend to neglect or underplay less anthropocentric considerations including ecosystem-level insights and basic animal rights and animal welfare issues. As such, language has often been a sword that divides the living world into two spheres and thus separates us humans from our environment. The use of outdated terminology is reflected in the way we consider and try to manage human behaviour around cetaceans. As long as the developments

in our understanding of the complex requirements to ensure conservation are not accounted for, our 'management' actions remain equally out of date.

Terms requiring reconsideration

Based on the above considerations on how language can influence our thinking and, hence, the way that we “deal” with cetaceans and their marine environment, we highlight some of the most prominent terms used in cetacean-related management and conservation and provide suggestions for more appropriate alternatives (see Table 1).

Table 1: Examples of loaded language with (dis)respect of cetaceans within two categories: A) Whaling & Bycatch and B) Management

A) Whaling & Bycatch

”**Catch**” – Euphemism used when talking about the killing of wild cetaceans for human use. The word may also suggest that individuals are not killed but simply confined.

Alternative suggestion: hunt, kill

”**Harvest**” – Euphemism referring to the hunting and killing of wild animals, somewhat suggesting that non-human animals are like plants that can be harvested because they were previously sowed.

Alternative suggestion: kill

”**Take**” – Euphemism referring to the disturbance, injury and killing (depending on context) of animals. The word suggests that a) animals can be “taken” without harm, and b) animals are “given” to humans so that humans can take them and benefit from them. While this logic has its own standing within the context of indigenous wisdom (where a killed whale is seen as a “gift” from nature or a divine entity), and is being valued and honoured accordingly and ritually, it does not seem an appropriate term in any purely utilitarian, commercial or management context.

Alternative suggestion: hunt, kill, disturbance, injury (depending on context)

”**Removal**” – Euphemism referring to the killing of animals. This term neutralises any notion of killing or harming cetaceans, and neglects impacts on individuals, communities, and ecosystems. It also suggests removing something that is undesirable.

Alternative suggestion: hunt, kill

”**Bycatch**”¹ – Euphemism used with reference to incidental mortality in fishing gear. While the term suggests that such incidents are unwanted and happening accidentally, in many fisheries bycatch can be a regular occurrence. In that sense, bycatch is an expected rather than unexpected outcome of the fishery.

Alternative suggestion: mortality, (unintended) kill

¹ According to the IWC website, bycatch “is the term given to the accidental capture of marine life in fishing gear”. FAO definition: “The catch of organisms that are not targeted”.

Table 1 (continued):

B) Management

“Stock” - A popular and widely used term to refer to wild animal populations in the context of fishing, hunting and whaling. In the main text we explain why this term is misleading.

Alternative suggestions: Population, subpopulation, population unit, unit to conserve², community

“Management Unit” - Suggests that animals need to be managed to comply with some human standard or expectation. However, in most cases what needs to be managed is human behaviour. Therefore, language should refer to the biologically and ecologically relevant entity.

Alternative suggestions: population, subpopulation, population unit, unit to conserve, community, matriline, collective, clan, pod etc. (depending on species and context)

“Quota” – Suggests that there is a legitimate share of a population that can be taken for human use. It also suggests that a natural population does not exist independently, but primarily for use by humans.

Alternative suggestion: Non-human animals that can be legally killed

The term “stock” can serve as a case in point because it is used so widely, within the IWC and beyond. In the case of wild populations of fish or cetaceans, the term stock suggests that these non-human animals exist primarily for human consumption or use – and they can be exploited accordingly. According to the Cambridge Dictionary³ the term stock is defined as a) “a supply of something for use or sale”, b) “the total amount of goods or the amount of a particular type of goods available in a shop” or, with respect to non-human animals c) “animals, such as cows or sheep, kept on a farm”. Ecologically speaking, however, there are no stocks in the sea (or any other ecosystem).

A stock of whales then, one can deduce, is a number of cetaceans (in a given area) for the use of humans, and the same would apply to other non-human animals such as fish or marine mammals in general, i.e. that the animals in the sea exist for the use of humans. The stock concept was no doubt originally presented in part to protect whales in defined areas from overexploitation. In relation to determining “catch limits” (another euphemism), it is nonetheless anchored in the exploitative nature of whaling management. Notwithstanding, new research into the social life, cognitive capabilities and the cultures of cetaceans is drawing a whole new picture. One that depicts them as sentient beings, with individual personalities and biographies, complex social societies, and unknown degrees of consciousness and self-awareness (Marino et al., 2007; Marino, 2011; Herman, 2012; Herman, 2017; White, 2015; CMS, 2018). In fact, it has been argued that they are “nonhuman persons” and, like humans and other non-human animals that possess these traits, have “moral standing” as individuals. This has repercussions for the way conservation efforts should be designed, including decisions

² See e.g., Taylor, Martien & Morin (2010)

³ See online version at <https://dictionary.cambridge.org/dictionary/english/stock>

about which individuals and cultural entities should be focused on (Brakes et al. 2019, 2021; Whitehead et al., 2023).

We also argue that this is no longer in line with biological and ecological thinking, but rather a convention that has not been thoroughly scrutinised so far, although it has been criticised before (see e.g. Pauly, 2019). Even more so, we **recommend** that this and other terms be replaced so as to be more consistent with current science-based understanding. Ideally, language should be adapted to encourage respect towards cetaceans and other wildlife while also avoiding reference to the perceived role of humans as rulers or masters of the animal world and acknowledging that non-human animals exist in their own right (Bearzi, 2020; Worm et al., 2021; Ritter, 2022). This may lead to more appropriate conservation measures, e.g. when “stocks” are replaced by cetacean cultural units (e.g., pods, clans, families, matriline; Ford et al., 1994, Whitehead & Rendell, 2015; Whitehead, 2024).

We recognise that this new way of thinking is increasingly being applied, also within International Environmental Agreements such as Convention on Migratory Species of Wild Animals (CMS), Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS)⁴, but we also note a need for more acceptance and increased application of alternative terms, in the context of the International Whaling Commission and beyond.

We are aware that delineating adequate populations and units-to- conserve is far from easy and has been a matter of great interest within the IWC (Martien et al., 2013) and elsewhere (Martien et al., 2019). We note the overarching conclusion from the IWC’s Status of Stocks Initiative (SOSI) 'Content Development' working group (IWC, 2023: Scientific Committee Report, Volume 25 Supplement October 2023, Annex D):

5.2.6 Use of the terms ‘stock’ and ‘population’

The Content ICG has recommended that the historical context (within the IWC) and meaning of the term ‘stock’ be explained, for example on the Glossary and Terminology pages. However, the introductory SOSI pages should avoid using the term ‘stock’, instead using ‘population’ to maintain accessibility to the public and because SOSI aims at reporting on stocks at the scale of ocean basins or whole populations as much as possible. However, the SWG noted that management stocks do not always coincide with biological populations and that, in some situations, it will be difficult to avoid using ‘stock’ (e.g., when there are multiple hypotheses on stock structure in the models). Moreover, the term ‘stock’ is likely to be needed for more technical (practitioner level) pages and thus proper usage should be considered carefully, including in relation to the use of the term in RMP documentation.

The SWG recognized that a diversity of opinions was expressed but **agreed** that the use of either term will need to be decided on a case-by-case basis, favouring ‘population’ when possible, especially for the most public-facing content. The SWG **agreed** that the Glossary and Terminology pages should present clear definitions of both terms.

We also note the draft definition of 'stock' from two SOSI working groups ('Content Development' and 'Glossary Group'), crafted specifically to be included on public-facing web pages so deliberately non-technical, which will be reviewed at the 2024 meeting:

⁴ While ASCOBANS did not define ‘biological units’ or ‘stocks’, these terms have been superseded within ASCOBANS by the employment of ‘management units’ (MUs), defined by the ASCOBANS-HELCOM Small Cetacean Population Structure Workshop in 2007, as: “a group of individuals for which there are different lines of complementary evidence (e.g. morphometrics, life history parameters, photo-ID, in addition to genetics) suggesting reduced exchange (migration / dispersal) rates over an extended period (low tens of years).

Stock - A term used in the IWC's founding document, the International Convention on the Regulation of Whaling. In current usage by the IWC Scientific Committee, a stock is generally equivalent to a 'subpopulation'. This usage derives from the scientists, many of whom were originally fisheries biologists, involved in the early efforts of the IWC to manage sustainable hunting of whale populations.

This highlights that the IWC is aware of a need to use its own language in a way that can be easily perceived outside its realm.

Discussion

In biology, certain terms are still avoided - or used only hesitantly - to avoid accusations of anthropomorphism. For example, what is called *friendship* in humans may be termed *long-term inter-individual preference* in other social mammals. What we call *personality* in humans, may be termed *inter-individual difference* in other mammals. We humans are *inhabiting* a terrain, while other mammals only *occur* there (Brensing, 2013, p.192, see e.g., Roche et al., 2016; Pittaras et al., 2022).

The terms used in Agreements and Conventions should conform to current knowledge and understanding, and be updated accordingly. In the case of the IWC, the International Convention for the Regulation of Whaling was set up in 1947, almost 80 years ago. Originally, such terminology may also have been intended to compensate for knowledge gaps, to permit interpretive leeway and enable negotiation between potentially dissenting factions, or to conform to the sensitivities of the time. Language used for a long time tends to become deeply entrenched and legitimised, irrespective of its intended use.

Nonetheless, the advances in our understanding of nature, reflecting scientific progress as well as ever-shifting perceptions, warrant a discussion on improving obsolete terms and adopting new ones, consistent with state-of-the-art discourse in the environmental sciences and humanities.

Organisations that mould our perception of nature and our interaction with it should be held to the highest standards, and ideally, they should use terms that are truthful and unambiguous. The IWC is internationally recognised as an international authority in matters related to cetaceans. The IWC has been turning uncontrolled whaling with disastrous consequences into differentiated and scrutinised scientific, indigenous and commercial whaling schemes. Novel environmental concerns, however, add a new urgency in re-examining some of the language and basic concepts used by this organisation (and others).

For instance, to describe the plight of the vaquita, the IWC issued its first “extinction alert” in 2023, which addressed the media in no uncertain terms, with echoes far exceeding those of past Scientific Committee pronouncements in IWC publications (<https://iwc.int/resources/media-resources/news/first-ever-extinction-alert-from-the-iwc>). Language can trigger action.

Here, we contend that outdated terminologies have played a role in determining attitudes and this in turn, the current alarming state of nature, and we suggest that the IWC should adopt language that reflects current scientific understanding and emphasises and promotes the interconnection between humans and other species. The WHO/FAO/OIE/UNEP One Health approach, “an integrated, unifying approach to balance and optimise the health of people, non-human animals and ecosystems”, may provide an appropriate context on which language change can be grounded (<https://www.who.int/news-room/fact-sheets/detail/one-health>).

Notably, the IWC Scientific Committee is examining the applicability of the One Health perspectives to some of its environmental focuses.

We are aware that changes in language such as those proposed here may affect management procedures or even administration, and understand that the adoption of new language takes time and effort. However, paradigm shifts tend to start with small steps, and our intention here is to start walking this path.

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