



Conservation Storytelling

Traditions, Practice, and Innovation

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Department of Geography, University of Cambridge
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Introduction

Storytelling in Conservation

For the first time in history, Earth’s biodiversity is severely threatened by human activity (Adams, 2012) (Macfarlane, 2016). To combat declines and foster appreciation of the natural world, conservationists utilise numerous tactics to preserve biodiversity while shifting human attitudes and behaviours (Verma et al., 2015). One mechanism for achieving the latter is communication (Jacobson, 2009) (Larson et al., 2016)—a broad discipline that encompasses everything from literature to nonverbal exchanges. Stories, I will argue, are a subset of communication with unique traits that can shift awareness (Whitley, 2012).



Figure 1: Conservation Storytelling

Stories are universal (Hogan, 2003) (Singh, 2005), uniquely human, and preceded the advent of writing (Rose, 2010). They bring people together but are more than tools of connectivity: they convey information, educate and influence, entertain, and preserve traditions and values (Duffield and Whitty, 2016) (Gottschall, 2013). Stories bridge gaps in culture, language, age and education—and many of their themes and forms transcend time and place (Svoboda, 2015) (McKendry, n.d.). Because stories give context to information while stirring emotions, they allow tellers and listeners the chance to “re-evaluate the world and [their] place in it” (Svoboda, 2015). Most importantly, because listeners find the story’s meaning, stories can prompt people to change their minds (Rose,

2010). Likewise, emotions impact decision-making, so emotional stories can inspire action—something facts alone rarely achieve (Jacobson et al., 2007).

Some say there are only seven stories in the world (Booker, 2004); others employ formulas when constructing them (Gottschall, 2013) (Olson, 2009). At a minimum, most stories follow dramatic arcs (Zak, 2013) that hinge on conflict (Sachs, 2012); and many contain recognizable structures that can be replicated (Rose, 2010). Conservation stories convey complex scientific information to the public and policy-makers (Rose, 2014 (Olson, 2009); likewise, discourse affects how people think about the environment (Clayton and Myers, 2009).

Working with CCI's arts, science, and conservation programme, I analyse storytelling and how it operates in conservation. I begin by exploring storytelling traditions before parsing out elements that make stories compelling (Part I). After identifying core elements, I turn to conservation storytelling in Part II, establishing key definitions before discussing how the elements broadly operate in conservation. Then, in Part III, I analyse case studies containing these elements, all of which end with recommendations or lessons.

Part IV addresses the challenges and opportunities facing NGO storytellers: To keep up with shifting media, NGOs must adapt—often with limited resources (Whetsell, 2015). But individuals and organizations telling stories about nature and wildlife (“scientist storytellers”) face unique challenges. Among others: conservationists are often trained scientists who are unfamiliar with storytelling, making it daunting (Olson, 2009); and even eager storytellers must accept that translating complex scientific information may require reshaping and simplifying (Interviewee 6). At the same time, storytelling is not a panacea for effective communication (Denning, 2000), so it must not undermine sound science and evidence-based conservation.

Some conservationists believe in evidence-based conservation that requires systematically evaluating evidence (Sutherland et al., 2004). Others prefer an evidence-informed method that incorporates qualitative data and indigenous knowledge (Adams and Sandbrook, 2013). Although this debate focuses on policy, it is worth noting that creative storytelling would benefit from an evidence-informed approach.

Part V discusses next steps and recommendations, among them building capacity, creating hybrid models while working with outside voices, and experimenting with story type and tone. Finally, in my conclusion, I address overarching themes and takeaway lessons. As explained under Methodology, research results are not individually relayed; instead, all findings are woven into sections structured by theme. Likewise, sections include their own conclusions, making an overall wrap-up unnecessary.

Storytelling Leadership

At its core, leadership is about communication (Hackman and Johnson, 2013). Leadership and storytelling are similar: both are performance arts aimed at persuasion, and both require an equal amount of thinking and doing (Denning, 2001). Strong leaders are strong storytellers (Zipes, 2012) who appreciate that stories help them highlight their organisation's work while motivating staff (Denning, 2011). The most effective show leadership by embodying their personal stories (Redekop, 2014). Organisations tell stories to the outside world (Boje, 2008) (Denning, 2006); and cultures and stories also dwell within their walls (Redekop, 2014).

Yet my research suggests that conservation NGOs devote nominal attention to methodically analysing and utilising storytelling. They must appreciate storytelling if they want to connect with the public, differentiate themselves, and achieve conservation leadership. Doing so requires fusing leadership and storytelling, a combination one might call "storytelling leadership." It presents the fundamental leadership challenge addressed herein; and contains external and internal implications. Organisational storytelling leadership that *externally* positions NGOs hinges on *internal* dynamics because: in-house storytellers prepare external communications; and employees care about their organisation's purpose more than its work, which is best communicated through storytelling (Zak, 2014).

Storytelling connects leaders with staff (Duffield and Whitty, 2016), and organisations ignite internal change through storytelling (Denning, 2000) (Jabri et al., 2008). Leaders must be able to inspire and influence (Dietz et al., 2004) and communicate complex, even unpleasant, ideas (Denning, 2011). Communicators and scientists alike require these skills: communicators must encourage science colleagues to share stories; and scientists can foster engagement through storytelling.

Personal Leadership

The placement also brought my leadership to the fore, beginning with my decision to design, rather than choose, a placement. Though my supervisors shared my vision and put forth two case studies, I selected the other two. I independently analysed the conservation storytelling landscape, finding challenges and opportunities; and I alone decided how to focus my research and analysis, and structure my report.

Although some conservationists are exploring how conservation can benefit from the arts (Jacobson et al., 2007) and storytelling (Rose, 2014), “conservation storytelling” is not a defined term, much less an established field, so I exhibited courage, leadership, and analytical skills when developing my typology and identifying challenges. Finally, since my work occurred outside any organisation’s office, I independently managed my time and coordinated interviews. Overall, I was pleasantly surprised to discover parallels between my efforts and the wider challenges facing conservation storytellers. Like conservation storytellers balancing science and storytelling, I created a report that was innovative yet analytical.

Methodology

I used four methodologies:

1. Literature and organisational material review;
2. Research interviews;
3. Content analysis; and
4. Data analysis.

Given its qualitative nature, my report predominantly draws from literature review and interviews. It is not structured by methodology type, nor are research results relayed in full. My report is organised around themes, with results woven into analysis. This approach allowed interviews to inform literature review and vice versa.

Literature review

Since conservation storytelling is not defined, I broached the subject after reviewing literature on conservation, conservation communication, leadership, and storytelling; to a lesser extent, I also researched marketing and branding. For my case studies, I consulted literature involving cuckoos, vultures, wildlife filmmaking, and Cecil the lion.

Literature regarding individual subjects is abundant whereas literature exploring their connections is scant. Having studied all subjects except storytelling during the masters, I spent the most time on it: What is storytelling? Why are people drawn to it? How can conservationists use it? These questions guided my literature review and interviews.

Interviews

I conducted semi-structured interviews, primarily in-person, with 21 individuals: nine work in NGO communications departments; three work in the wildlife documentary industry; three are journalists; three are scientists; one is an oral storyteller; and two work with CCI's arts, science, and conservation programme. Although my report is intended to help conservation NGOs, I consulted outside storytellers to capture broader, and at times more sophisticated, views on storytelling. Some interviews directly related to specific case studies; others were broad. All yielded results pertinent to conservation storytelling.

I chose semi-structured formats for several reasons: they foster conversations, especially those aimed at gaining understanding (Newton, 2010)—which is, ultimately, the role of qualitative research (Gillham, 2000). However, interviewers sometimes bring biases (Williams, 1964); and interviewees can misunderstand questions (Newing et al., 2010). To minimise error and bias (Fowler and Mangione, 1990): I prepared questions in advance, and transcribed or recorded all interviews.

Appendix 1 contains a list of all interviewees. Sample questions for communicators are in Appendix 2.

Content Analysis

This analysis comprises a fraction of my research and predominantly concerns wildlife filmmaking. Although I have seen countless wildlife programmes, I wanted to watch several with an analytical eye. With limited time, I chose to watch two feature films—*African Cats* and *Racing Extinction*—as well as episodes of several television programmes—*Planet Earth*, *Africa*, and *Natural World: The David Attenborough Collection*—all of which premiered during the last ten years, ensuring relevance.

Data Analysis

Because I took an arts-based approach, I had limited opportunities to analyse hard data. However, there were several points at which I attempted to synthesise quantitative data before realising my attempts were unproductive. For instance, I ran date- and word-specific Google News Archives searches on Cecil's death to understand how stories about him evolved, but my searches only returned a fraction of news hits, so I contacted Oxford's WildCRU department to see if they had gathered similar information.

Limitations

In addition to above limitations, I note:

- Though I discuss how and why people tell stories, I do not analyse the extent to which stories impact human behaviour, nor do I address how shifts in behaviour and attitude influence conservation outcomes.
- I do not test the success of story elements by, say, comparing web traffic generated by a story depicting a hero's quest versus one simply showing a character confronting obstacles.
- Except for making references to photojournalism, I do not explore fine arts storytelling.
- I only analyse stories told in English, and mainly those emanating from the United Kingdom. Future research is needed on how stories are told in different languages and cultures.

Part I: The Art of Storytelling: Traditions and Practice

We are, as a species, addicted to story. Even when the body goes to sleep, the mind stays up all night, telling itself stories.

-Jonathan Gottschall

Storytelling is poorly understood, but there are theories explaining why humans crave stories: stories function as cognitive play; stories bond people together; and stories exist solely for entertainment (Gottschall, 2013). Stories cause external and internal impacts: externally, stories are observed and can be analysed; internal impacts involve how participants experience stories (Denning, 2011). Overall impacts are far-reaching: stories bring people together, help people imagine future possibilities, stir imaginations and emotions, help people transfer and remember information, and mobilise action (Frank, 2010). Stories also help us understand ourselves, and our world (Polkinghorne, 1991). Most important to the conservation context, stories' emotional impacts can "lead to that rare event, a change of mind" (Rose, 2010, p. 44).

Definitions

To understand storytelling, one must begin by defining "story," a task that proved difficult. The Oxford Dictionary calls story, "an account of imaginary or real people and events told for entertainment; a plot or storyline; a report of an item of news." Merriam Webster says story is: "history; an account of incidents or events; an anecdote—especially an amusing one; a statement regarding the facts..." These definitions depict various story types, from those reporting facts to accounts, some fictitious, designed to entertain.

A liberal construction could, therefore, call all conservation communications—from press releases to Tweets—stories. Similarly, stories are told through myriad mediums, from literature to oral storytelling to photographs. Some experts view all types under one umbrella (Denning, 2011). Denning also uses *narrative* and *story* interchangeably, defining both as accounts presenting casually related events, while Frank (2010) believes stories involve specific events while narratives "are the resources from which people construct the stories they tell" (p. 14). Most interviewees use the terms interchangeably, so I do the same.

In the conservation context, narratives are stories that have been so repeated, they become pervasive in opinion, policy, and literature—often with such force that overturning them requires powerful counter-narratives (Roe, 1999).

Formulas

Some communicators believe in storytelling formulas, such as:

1. Story = character + predicament + attempted extrication (Gottschall, 2013).
2. Story = arousal + fulfilment OR motivation + education (Olson, 2009).
3. Story = surprising episode + tension + difficulties + climax + transformation and resolution (Zak, 2013).
4. Drama = anticipation + uncertainty (Stanton, 2012).

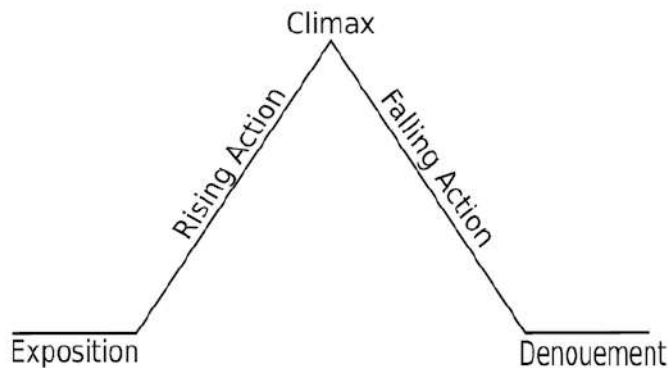


Figure 2: Freytag's storytelling pyramid. Reproduced from Wikipedia's "Dramatic Structure."

The more research I conducted, the more I came to believe that stories are not exact and cannot be reduced to a formula or science: they “have guidelines, not hard fast rules” (Stanton, 2012). Storytelling handbooks are overly narrow and include terms that are too vague to offer useful guidance (Truby, 2007). Besides, applying a singular formula to my case studies would have impeded individual analyses while preventing me from connecting them.

In sum, though I initially hoped to discover a definition of “story,” literature review and interviews suggest that story is too complex for a singular definition. My research did,

however, highlight recurring elements that make stories compelling. I pulled them out, creating my own typology.

Core Story Elements

Stories:

1. Enchant and inspire wonder;
2. Show rather than tell;
3. Feature change, drama, and tension;
4. Feature clear characters that are ideally relatable;
5. Depict a hero overcoming obstacles—sometimes on a quest;
6. Pit good against evil using protagonists and antagonists; and
7. Engage the listener.

Among others, informed by: (Interviewee 3) (Louv, 2005) for 1; (Olson, 2009) (Truby, 2007) (Warren, 2011) for 2; (Stanton, 2012) (Gotschall, 2013) for 3; (Hayden and Dills, 2015) for 4; (Gotschall, 2013) (Truby, 2007) for 5; (Interviewee 4) for 6; (Kroeber, 1992) (Interviewee 8) for 7.

Several caveats deserve mention. First, given my qualitative focus and space limitations, I have not tested the success of these elements in conservation through, say, web traffic generated by one story versus another, though I occasionally mention a story's success, extrapolating explanations for it. Second, although story elements described in this report are powerful tools, they are not intended to be used all at once or in every story. In fact, it could be argued that several of them are mutually exclusive: for instance, a positive, awe-inspiring story might not work if it included villains.

In the next section, I say more about these elements before applying them to case studies to understand how they operate in the conservation realm.

Leadership Reflection

Defining “story” was my biggest challenge, especially since the most interesting components of BTO’s cuckoo tracking project and BirdLife’s vulture video fall outside traditional storytelling frameworks. At the same time, I believe that impact is more important than framework: great works of literature are rarely remembered for their structure. They resonate because of characters, plot lines, moral messages, and what they teach us about ourselves.

Part II: Conservation Storytelling

What is a Conservation Story?

Having eschewed defining “story,” instead drawing out core elements, it was clear that I would analyse conservation stories through elements. It was nevertheless important that I consider the meaning of “conservation storytelling.”

“Conservation storytelling” is not a defined term nor studied field. Literature involving storytelling abounds, as does information regarding NGO communications, but I struggled to find sources marrying the two. However, as my project suggests, there is growing interest among conservationists to explore creative communication. Some have already highlighted storytelling: WWF’s CEO devoted the 2013 Annual Report introduction to storytelling, writing, “Telling stories about the natural world... and our part in protecting it forms the nexus of what we do... I can think of no skill more important to our work” (Roberts, 2013, p. 3).

Although most of my conservation storytelling analysis involves case studies, I began by broadly observing how conservation NGOs tell stories. I predominantly looked at websites—BTO and BirdLife, and a range of others, from WildAid and the Wildlife Conservation Society to WWF USA and WWF UK—noting that few conservation NGO websites feature long-form narratives containing identifiable characters, obstacles, and resolutions. More common are news-style disseminations, links to external publications, and short, image-driven content. However, like commercial print publications, NGO magazines use more traditional formats and narratives. Some employ the core elements in my typology. By way of example, in FFI’s August 2015 issue, Rakowski (2015) uses dramatic phrases like “mortal danger” and “risks to life and limb” when discussing “everyday heroes” (p. 6).

Who is the Storyteller?

Although I interviewed a range of storytellers, I focus on conservation NGO storytellers for two reasons: I had the greatest access to NGO communications staff; and, since my placement involves working with two NGOs and a CCI initiative, my findings are designed to aid conservation NGOs. Just as humans are storytelling animals (Gottschall, 2013) (Fisher, 1984), organisations are storytelling systems (Boje, 2008) (Denning, 2006); so my focus on NGO storytellers captures stories disseminated by organisations, as well as internal processes that bring stories to life. I take a similar approach with leadership, considering how the organisation externally positions itself while analysing how stories are told to and among staff.

Who is the Audience?

Conservation organisations communicate with multiple audiences: fellow organisations and scientists, policy and lawmakers, governments, donors, and the public. I spoke with storytellers disseminating publicly available communications with the general public. Multiple interviewees and sources discard the idea of one “general public,” (Cloke et al., 2000), and successful communicators target specific audiences, but without accessing analytics breaking down user profiles, I can only provide a rough sketch of the public receiving the stories described herein.

Since I spoke to British organisations, and reviewed materials published in English, I can extrapolate that a typical audience member is a native English speaker based in the UK (or a similar country) who has access to the Internet. Global conservationists increasingly communicate in English—with the values that accompany it (Soeftestad, 2004). Future research on how stories are told in different countries—particularly in places where endangered wildlife resides— is needed.

Finally, since I consider multimedia, I alternate between “readers,” “listeners,” and “viewers” when referring to audiences.

Leadership Reflection

Developing and completing my placement required leadership. Tapping into the meaning of “story” required courage: I worried that by dissecting stories to understand their power, I might disrupt a “sacred preserve... the last bastion of magic. [Stories] are the one place where science cannot—and should not—penetrate” (Gottschall, 2013, p. xv).

Core Story Elements in Conservation

Many of the story elements work together, and some may be inseparable (e.g. hero's quest and drama), but I am not analysing their relationship to one another nor am I suggesting how they should be used together. Instead, I provide information about each of them in the conservation context—highlighting why they are important while flagging risks they bring—before applying them to case studies.

Enchant and inspire wonder

Conservation NGOs and scientist storytellers want to tell conservation stories, many of which include bad news about the environment. But wildlife filmmakers and magazine editors know that audiences sometimes prefer stories exhibiting the weird and wonderful facets of the natural world. Some interviewees described a commitment to inspiring and entrancing audiences, and the broader environmental community seems hungry for positive narratives, as evidenced by social media hashtags like #EarthOptimism and IUCN's Love, Not Loss campaign (IUCN, 2010).

Show, Don't Tell

One of the central tenets of artful storytelling is that tellers show, not tell, which means conveying stories through sensory details, dialogue, and action rather than simply telling readers what happens (Parnell, 2014). Although telling has its place, showing is crucial for engagement: it gives readers agency over a story, which makes them feel invested (Parnell, 2014).

Subtlety is especially important when stories contain moral messages, which are embedded in many conservation narratives (Truby, 2007). Subtle storytelling may be compelling, but it may lack educational potential since educational communications usually require overt, often repetitive, messages (Olson, 2009).

Drama and Tension

Compelling stories almost always begin with an unexpected or bizarre occurrence (Frank, 2010). With words like “crisis,” “battle,” and “predicament,” storytelling formulas underscore that stories require change and drama. Conflict captivates viewers (Gottschall, 2013); fortunately, the natural world is full of conflict (Leon, n.d.). Tension, or not knowing whether characters will achieve their aims, maintains the audience’s attention (Zak, 2013).

But drama can lead to negativity, spectacle, and oversimplification; and can alienate conservation partners (Scales, 2015) (Case, et al., 2015). Likewise, it can lead to donor, and reader, fatigue, causing distrust of NGOs that appear to cry wolf—another reason stories must be grounded in sound science (Scales, 2015). Storytellers must think before playing on fear: research shows that fear is only taken seriously when people believe the negative consequences will occur without feeling hopeless (Clayton and Myers, 2004).

Clear (and ideally relatable) characters

We remember stories by remembering characters (Olson, 2009), and our recollections of characters are higher when we identify with them (Cohen, 2001). Identification leads to mimicry, which can lead to action, such as charitable giving (Zak, 2014). Some believe that conservation audiences only care about nature as it relates to people (Futerra, n.d.).

Finding relatable characters may seem problematic for organisations telling stories about animals (Leon, n.d.). Yet stories featuring fantasy animals are the bedrock of children’s literature (Lewis, 1995), television and film (Melson, 2013). Moreover, reactions to Cecil’s death prove that humans care about real animals. Indeed, some observers noted that Americans showed more concern for Cecil than for Syrian refugees (Kohn, 2015).

Encouraging connection between audiences and characters may require anthropomorphism, which scientists have historically disdained (Leon, n.d.). But much has changed since Jane Goodall kept observations about human-like animal behaviours to herself, fearing backlash from her colleagues: now, more scientists feel comfortable discussing animals’ likely mental states (Morrell, 2014). Multiple interviewees explained that conservationists are also learning to personify animals through naming and blogs. As

explained in Cecil's case study, personification leads to greater media coverage since reporters are more likely to cover news pertaining to clear characters than anonymous individuals or groups (Verma et al., 2015).

Primary characters are important, but some storytellers mistakenly separate characters that are “part of a web in which each helps define the others” (Truby, 2007, p. 57). Often, blue chip documentary filmmakers keep animal and human characters separate, knowing audiences often dislike seeing humans in wildlife programmes. Yet, divorcing the human from non-human is a false premise (Interviewee 4)—and one that precludes forging connections between human behaviours and conservation.

Goals and obstacles (and, more dramatically, heroes quests)

All characters face conflicts (Leon, n.d.) while pursuing dominant goals (Stanton, 2012). The most dramatic obstacles confront heroes on a quest. The hero's quest is so powerful, it is found in more than half of Hollywood films (Zak, 2013). According to Truby (2007), a hero's quest involves seven key steps: weakness + desire + opponent + plan + battle + self-revelation + new equilibrium. While some of these steps only work with human characters, their trajectory can apply to animal heroes.

Good v. Evil; Protagonist v. Antagonist

In addition to telling character-driven stories, conservation storytellers should tap into one of the most enduring storytelling themes: good versus evil. In the conservation context, poachers are obvious villains. Of course, non-animals can be evil, too, something Rachel Carson understood when depicting DDT as the enemy of human health in *Silent Spring* (Ingram et al., 2014). But conservation storytellers must be cautious about casting antagonists, paying attention to nuanced circumstances and shifts in public attitudes.

Engagement

In one-dimensional storytelling, tellers transmit messages to receivers, but current communication involves greater complexity (Jacobson, 2009). No longer are stories told to passive listeners; audiences now give meaning to the stories they receive (Meadows,

2003) (Page and Thomas, 2011), resulting in a polyphony where multiple people communicate (Jabri et al, 2008).

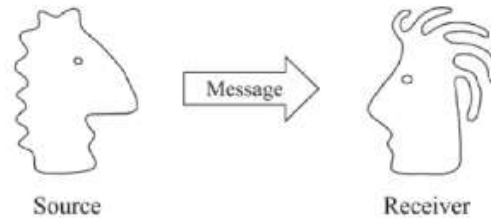


FIGURE 1.1. Simplified model of the communication process.

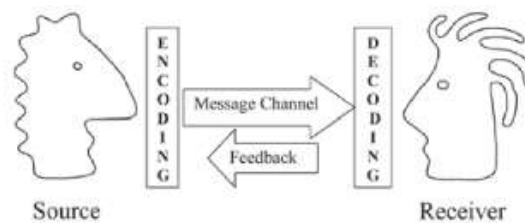


FIGURE 1.2. Current models of communication reveal the complexity involved in delivering a conservation message.

Figure 3: Reproduced from Communication Skills for Conservation Professionals (Jacobson, 2009)

Today’s storytelling experience is intended to be interactive, and stories are designed to be told again and again, every story an adaptation of its prior iteration (Kroeber, 1992). Finally, storytelling is more democratic than ever: using affordable, open technologies, nearly everyone can become a storyteller (Kalogeras, 2014). Together, these changes foster engagement and story-retelling (Sachs, 2012).

But engagement brings risk: Like a game of telephone, multiple transmissions can threaten a story’s underlying message (Sachs, 2012). To preserve story integrity, tellers must “tell stories that provide meaning” (Sachs, 2012, p. 20).

Engagements that Show, Don’t Tell

BirdLife’s story maps let users chart their own course. Like video games or Choose Your Own Adventure “gamebooks” of the 1970s and 80s (Hendrix, 2011), users design their own story-receiving experiences. Notably, several NGOs have partnered with gaming companies to explore how games can boost conservation (CCI website).

Part III: Core Elements Applied to Case Studies

| STORYTELLING ELEMENT | CONSERVATION EXAMPLES | POTENTIAL BENEFITS | POTENTIAL PITFALLS |
|-------------------------------|---|--|---|
| Enchant/Inspire | Blue Chip Documentaries; Vultures | Builds connections between viewer & natural world | Hard to educate or inspire immediate action |
| Show, Don't Tell | Blue Chip Documentaries; Cuckoo Tracking | Engages viewer; subtly presents information/morals | Hard to educate or inspire immediate action |
| Drama/Tension | Blue Chip Documentaries; Cuckoo Tracking; Cecil the Lion | Hooks viewer; greater impact when story climaxes | Oversimplifies natural world; tendency toward spectacle and/or doom & gloom |
| Clear Characters | Cuckoo Tracking; Cecil the Lion; Vultures | Hooks viewers; connects viewers to events/issues they have not experienced | Oversimplifies natural world; anthropomorphism and personification |
| Goals/Obstacles; Hero's Quest | Cuckoo Tracking; Blue Chip Documentaries | Engages viewer; encourages positive behaviours | Anthropomorphism and personification; tendency toward spectacle |
| Good v. Evil | Blue Chip Documentaries; Cecil the Lion; Vultures (potentially) | Hints at morality; can foster emotional reactions and behaviour change | Oversimplifies natural world; tendency toward spectacle |
| Engage Listener | Cuckoo Tracking; Cecil the Lion; Vultures | Engages and empowers listeners; increases story's spread/duration | Shifting story; less control over message |

Table 1: Core Elements Present in Case Studies

Most terms are self-explanatory, but I note:

“Hook” and “engage” are different. I use “hook” to express simple captivation whereas “engage” suggests viewer action. The benefits and pitfalls are possibilities, not guarantees.

Expanding on the table, I explore how the seven story elements operate in four case studies. In some instances, elements are addressed individually, but when two or more are inextricably linked, I discuss them together. Finally, at the end of case studies involving my host organisations, I include recommendations for the future; I conclude case studies on Cecil and wildlife documentaries with takeaway lessons that could be valuable to all conservation NGOs.

BTO’s Cuckoo Tracking Project

Their disappearance would be doubly sad: we would lose not only our harbinger of spring, but also some of the most amazing dramas of natural history anywhere on earth.

- Nick Davies

Introduction

Cuckoos are facing severe declines, with numbers having plummeted by 65% since the 1980s, but conservationists do not know why (BTO website) (Davies, 2015). In 2011, BTO launched a tracking project to understand cuckoo migratory patterns (Davies, 2015), but the project also serves as an engagement tool, with a website where visitors can watch tagged birds travel from England to Africa and back again—in real time (BTO website). All tracked birds receive human names, some by fans of the project (Interviewee 5).

In partnership with CCI, BTO also works with artists to tell creative stories about cuckoos: Among them are photojournalist Toby Smith and oral storyteller Malcolm Greene (Interviewee 13). The two storytellers travelled to Gabon to compose stories about cuckoos in Africa. Smith uses photography to explore landscapes in an effort to shift the birds’ geographical connection from the UK to Africa (Interviewee 12); performing at BTO- and CCI- sponsored Cuckoo Day, Green presented a lyrical tale about cuckoos that used sensory details to bring people into the birds’ inner worlds (Interviewee 21).



Figure 4: BTO's tagged cuckoo website. Reproduced from BTO's Cuckoo Tracking Website

Engaging Audiences by Showing, Not Telling

Since viewers follow live migrations, BTO lets stories unfold without controlling them; likewise, live stories are inherently engaging. There is some editorialising in the affiliated blogs, but they are largely fact-based, simply relaying information about individuals' movements.

Smith and Green's artistic stories also show without telling. Smith is so committed to showing, he exhibits photographs without descriptive text, nor will his exhibition feature images of cuckoos themselves; rather, he hopes audiences build their own links between cuckoos, landscapes, and people (Interviewee 12). Green uses oral storytelling to "evoke the environment in which the bird exists" so audiences can become "participants as much as recipients," allowing them to create their own perceptions. He also understands the need for responding to the audience as he performs. Indeed, no performance is the same; instead, both script and delivery "depend on feedback from audience and place" (Interviewee 21).

Several additional components—from naming competitions to social media updates—give cuckoo tracking the two-way, interactive quality emphasised by Jabri et al. (2008).

A Quest Fraught with Drama and Tension

Cuckoos migrate over a vast range, with birds summering in England spending most of the year in Africa (Wyllie, 1987). Their journey represents a core story arc: the quest or hero’s journey. It is fraught with risk and uncertainty, which adds drama and tension; and cuckoos face other obstacles, such as dwindling numbers, all of which interfere with their desire to survive. There is no clear cause of declining numbers, but additional research may illuminate antagonists like climate change and wind farms.

Informally, BTO’s communications strategy includes a balance between uplifting good news and dramatic bad news, and media outreach is targeted, with pitches tailored to specific publications. Some of the organisation’s highest performing press releases used provocative headlines, such as “Cat Eats Norwegian” (Interviewee 13).

Clear Characters

Early on, BTO knew it needed to personify tracked birds to generate public interest, something researchers resisted until they envisioned engagement potential (Interviewee 5). Cuckoos are inherently interesting: they have distinctive calls; exhibit unique behaviours; and stand out because they only reside in a given part of the world for part of the year (Interviewee 13). Human names turn individuals into story characters.



Reed warbler feeding cuckoo chick © David Kjaer

Recommendations

- Test and measure story success using analytics. For instance, BTO could create comparable Facebook posts—one telling the story of an individual bird and another discussing all tagged birds, or one featuring a bird photo and another showing a tracking map—to see which performs better. Note: variables like time of day, number of weekly posts, etc. should be controlled.
- Expand cuckoo tracking website by using, among other things: blog posts that include imagery; and stories that connect birds to landscapes where they live.
- Develop future MPhil placements exploring these topics (e.g. how naming impacts engagement; whether certain names perform better than others).

Point of Clarification

As discussed under methodology, I analysed quantitative data when it seemed productive. To test the power of personification, I sifted through BTO cuckoo Tweets during two periods of high activity— spring and summer 2016—comparing the reach of Tweets mentioning cuckoos by name versus those simply using the word “cuckoo.” I found that, on average, during spring named Tweets had far greater reach, but during summer the two were close, with unnamed Tweets performing slightly better. With myriad variables (time of Tweet, number of Tweets sent on a given day, etc.) I could extrapolate little from this analysis, which is why the body of my report disregards it.

BirdLife’s Vulture Advocacy

As to appearance, none of the Vultures can boast of grace of form or splendour of plumage, but if the old adage be true, that ‘handsome is that handsome does, the Vultures, which are the acknowledged chiefs of Earth’s Purifiers, might claim the foremost rank in beauty.

- George John Wood

Introduction

Vultures are among the most globally threatened birds (BirdLife website): 61% of vulture species are threatened with extinction, and the worst declines occur in areas that historically housed high concentrations (Ogada et al., 2012). There are diverse threats, but unintentional poisoning and intentional persecution harm nearly every declining population, and targeted persecution often occurs because people dislike or misunderstand vultures (Ogada et al., 2012).

In most cultures, vultures are considered ugly creatures that symbolise death (Associated Press, 2015). They are also seen as opportunistic and greedy: Indeed, the Oxford Dictionary provides a secondary definition, “a contemptible person who preys on or exploits others.” Negative portrayals of vultures are found throughout film, television, and music.

Elsewhere, vultures are sacred. For thousands of years, Mumbai’s Parsi community and their Zoroastrian ancestors have used vultures to purify bodies in a funerary system called “dokhmenishini,” and a similar ritual, sky burial, occurs in Tibetan Buddhism (Van Dooren, 2011). Writer John George Wood called vultures *purifiers* rather than *scavengers*, and the original genus name, *Cathartes*, stems from the Greek word for cleanser or purifier (Van Dooren, 2011).

Clear Character

To increase interest in vultures, conservationists must get creative (Associated Press, 2015), so in 2015 BirdLife sought to rebrand vultures using a video, “Saving Nature’s Clean Up Crew” (BirdLife website). The camera focuses on a single vulture while the narrator says, “I am misunderstood...I am the bringer of life...cleaner of your world...halter of disease...sentinel of your skies...” (BirdLife website).



Saving Nature’s Clean-up Crew Video © BirdLife International

By focusing on one individual, BirdLife admittedly simplified a nuanced story with multiple characters (Interviewee 9). However, as seen with Cecil the lion, choosing one individual has benefits: research suggests that people are more likely to donate when the charitable plea features a single character versus a group (Sanders and Tamma, 2015). It would be interesting, therefore, for BirdLife to consider more stories that focus on a single bird.

Engagement Built on Emotion and Awe

The video became BirdLife's second most viewed Facebook post, with a reach of 1.1m people (Interviewee 8). Its success likely stemmed from personification of the vulture and the use of a social media hashtag, "lovevulture," that sought an emotional response from viewers (Interviewee 7). The video's final message also sparks engagement by asking viewers to take action (BirdLife website).

Recommendations

Changing perceptions about vultures will require more than one video: For collective ideas to change, an ideology must collapse and then consolidate (Legro, 2000). BirdLife can facilitate this two-step process by chipping away at perceptions through positive stories (e.g. #lovevulture) while testing narratives. I also suggest that BirdLife:

- Use comparable versions of the same story to gauge reactions to elements like personification and themes like cleansing. For instance, the next time BirdLife produces a video, staff could create one version featuring an individual bird and a similar version showing multiple vultures, comparing their success. BirdLife could also test the cleansing theme against one of peace, conveying that vultures do not kill other animals. Note: analysis should not merely look at audience reactions and web activity; it should also analyse accompanying fundraising activity;
- Expand cleansing theme by emphasising sustainability and recycling;
- Consider adding drama via good versus evil, with vultures as protagonists and persecutors as antagonists, though doing so risks harming relationships with locals living alongside vultures. However, this strategy would work well in the

- poaching context, since poachers poison vultures to keep them from flagging carcasses (Ogada, 2014); and
- Develop future MPhil placements exploring these topics (e.g. personification in conservation communication).

Cecil the Lion

Cecil has become, albeit unknowingly, a martyr for a cause.
- Jane Goodall

Introduction

As a case study, Cecil deviates from the others since the lion's story was not disseminated by one outlet but was instead told by myriad voices, from NGOs to newspapers to social media users. I analyse it, however, because it features a number of core elements, and several NGOs are capitalising on the story's impact.

There are countless fictitious stories involving animal characters—from *Bambi* to *Finding Nemo*—that resonate with the public (Whitley, 2012), but few stories involving real animals have garnered international attention (Macdonald et al., 2016). A notable exception is Cecil, a lion killed by an American trophy hunter in July 2015; his death prompted international media coverage (Funston et al., 2016) and caused *Time Magazine* to call Cecil the most influential animal of 2016 (Stein, 2016).

Oxford University's WildCRU analysed traditional and social media in reaction to Cecil's death, finding "an unprecedented media reaction" spanning the globe (Macdonald et al., 2016, p. 1). Macdonald et al. (2016) believe Cecil's story resonated because: Cecil was a majestic, well-studied animal with an English nickname; he died a slow, painful death; he was killed by an identifiable villain; and anger, the main reaction to Cecil's death, causes more social media sharing than sadness.

Clear Characters Representing Good v. Evil

Cecil was an alpha male protecting a pride, an asset to Oxford's lion research, and important to tourism since he was popular within Hwange National Park (Patta, 2015), making him an identifiable character even before he died. He became the starring

character in the story of his death, likely aided by the fact that he had an Anglo name (media activity occurred around the globe but was highest in North America) (Macdonald et al., 2016).

Walter Palmer is a wealthy American dentist who caused Cecil suffering by wounding, rather than killing, the lion using a bow and arrow (the next day, Palmer's guides killed Cecil) (Alexander et al., 2015). When people heard about Cecil's death, they expressed loathing for Palmer; the backlash caused the dentist to close his office for weeks (Goode, 2015).



Palmer with Cecil © Walter Palmer

It is clear that Cecil's story presents a protagonist and antagonist in a battle between good versus evil. As previously discussed, stories about one (or several) characters perform better than those involving multiple characters (Sanders and Tamma, 2015), which may explain why people strongly reacted to Cecil's death. These elements no doubt contributed to the story's power, but pro-hunting organisations must dislike the way it oversimplified trophy hunting. The public, meanwhile, may not understand or want to hear a nuanced analysis of hunting.

Drama & Tension

Cecil's laborious death created drama, and tension arose when months passed before it emerged that Palmer would not be criminally charged (USA Today, 2015). Tension also

surrounded Cecil's pride, with many worried that another male would take over, killing Cecil's cubs (Robinson, 2015).

Engagement

Stories are meant to be retold (Kroeber, 1992), which is what happened with Cecil. Between 1st July- 30th September, Cecil's death led to nearly 100,000 editorial media hits, arguably prompting a "Cecil the Lion Movement" (Macdonald et al., 2016, p. 1). Cecil's case demonstrates the way story-receivers become part of the story. Through social media and protests, people expressed their views and emotions.

Lessons

Readers could digest Cecil's story because it had limited characters playing defined roles, a model NGOs should consider when telling future stories. Cecil's case also suggests that hunting, at least by wealthy outsiders, provides clear villains, and poaching almost certainly offers the chance to pit good against evil; though some conservation storytellers believe the tide will turn when more people realise why poachers kill (Interviewee 10).

Overall, NGOs must be cautious when vilifying actors or activities since they work with a wide range of stakeholders on complex issues. Depending on their missions and funding structures, they can take strong stances (Interviewee 3), but morality is best presented subtly (Truby, 2007).

Wildlife Documentaries

The best programmes are like stories; they all have a narration in which you want to see what is next. And this works for a detective novel and a science programme.

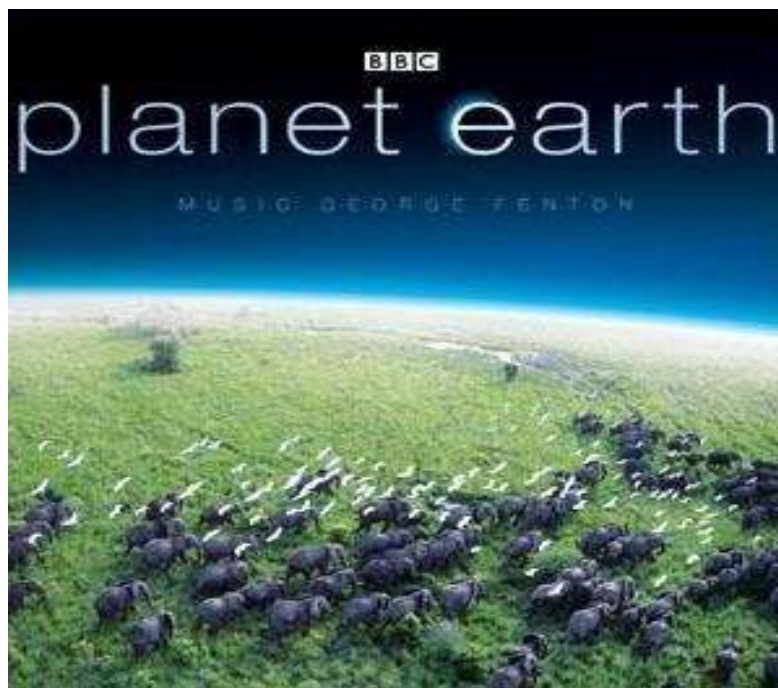
- David Attenborough

Introduction

Wildlife films and TV programmes have been immensely successful: from the early days, they have competed with fictitious commercial films (Dingwall and Aldridge, 2006), and the most popular videos have been watched by millions (Davies, 2006). When it comes to

conservation storytelling, wildlife documentaries have been instrumental in raising conservation awareness (Goodall, 2010) and popularising science (Leon, n.d.).

Of my case studies, they are the most artful, blurring the lines between art, entertainment, and science (Singh, 2005); and they employ nearly all of the core elements. They are different in another way, too: the storytellers behind them are primarily seeking to entertain viewers, although some, like the BBC Natural History Unit, also aim to educate (Interviewee 3). I will focus on blue chip documentaries, those programmes that: focus on megafauna in places of visual splendour; utilise dramatic story lines; and typically exclude politics and people (Bouse, 2000) (Dingwall and Aldridge, 2006).



BBC Planet Earth © BBC

Enchant and Inspire Awe

These programmes trade in “wonder and escapism” (Interviewee 4) and emotionally capture viewers, which arguably leads to admiration for the natural world and support for conservation (Interviewee 3) (Singh, 2005). Writing about Disney’s animated films, Whitley (2012) said they use sentimental devices, often oversimplifying the natural world, while “inspiring a powerful empathy to be built up between the viewer and an

archetypal image of nature as a form to which we are connected and owe allegiance” (p. 3). My content analysis suggests blue chip documentaries do the same.

Programmes like *Africa*, *Life*, and *Planet Earth* awe without recurring characters, though one might consider narrators or subjects (e.g. oceans or Africa’s regions) characters. Some are more shock-and-awe than awe-inspiring: the *Africa* scene depicting two male giraffes fighting became a viral video (ABC’s Good Morning America).

Show, Don’t Tell, Sometimes with Clear Characters

Blue chip films show rather than tell, as evidenced by their detachment from politics; and beginning with *Rango*, a 1929 film centred on an animal protagonist, programmes expertly create characters to whom viewers can relate (Singh, 2005). A prime example is Disney’s *African Cats*, whose characters fit into defined human archetypes—from protective mothers to wise elders—making them relatable.

However, human characters are often missing (Interviewee 3); and animal characters are usually charismatic megafauna, which risks viewers only developing concern for certain species (Singh, 2005). At the same time, though personification attracts viewership, viewers sometimes become so attached, they want filmmakers to intervene when animals experience distress (Verma et al., 2015).

Storytelling Leadership

David Attenborough is the most popular wildlife documentary narrator. What accounts for his capable storytelling leadership? Leon (n.d.) believes Attenborough’s most important attribute is enthusiasm; others point to his infectious curiosity for the natural world (Interviewee 10). Overall, his connection to the stories he explores, and the viewer, is an emotional one (Leon, n.d.).

Drama & Tension; Good v. Evil

Some blue chips inspire and enchant; others play on conflict (Leon, n.d., p. 7). They often draw from universal narratives, including life and death and family ties (Dingwall and Aldridge, 2006). But drama often bleeds into sensationalism, as evidenced by the popularity of series like *Shark Week* (Palmer, 2010). These programmes do not just

dramatise the natural world, they reinforce negative stereotypes about animals (Sosa, 2013) (Gore et al., 2012), which may reduce public interest in conserving them (Maloney, 2013).

Lessons

Many believe the success of blue chip documentaries comes at a cost. There are ethical considerations, like how footage is obtained and whether viewers are misled (Palmer, 2010); and the fact that, by using storytelling tools that attract mainstream audiences, blue chip documentaries often present simplified, sanitised tales (Singh, 2005). Overt conservation messages are often avoided: *March of the Penguins* never mentions climate change (Palmer, 2010). At best, they are mere afterthoughts—*Africa* only discusses conservation in the final episode.

In general, blue chip documentaries' impact on conservation is questionable (Dingwall and Aldridge, 2006) (Palmer, 2010); so additional research into their effectiveness is required. However, NGOs should nevertheless consider their artful storytelling when creating stories, especially since video is fast becoming the most storytelling medium (Comm, 2016). Sound judgment and leadership will ensure NGOs remain true to their values as they explore new storytelling tools.

Part IV: Conservation Storytelling: Challenges & Opportunities

The powerful and effective communication of science has to be a much higher priority than ever or the science community will lose its voice, drowned out by either the new anti-science movement or just the cacophony of society's noise.

- Randy Olson

Shifting Media Landscape

Decades ago, organisations communicated with the public through magazines, mailings, and events; now they have an endless, sometimes overwhelming, array of choices (Grabowicz, 2014). Some consider the new paradigm a threat to storytelling, but core elements remain in place (De Monte, 2013); and storytelling remains paramount to communication (Higgs, 2014). New media challenges also bring silver linings of opportunity: with new media, organisations can easily reach global audiences (Whetsell, 2015).

There are more ways to connect with audiences, but people have never been harder to reach (Sachs, 2012) since users bounce between disseminations, their desire for stories immediate (De Monte, 2013). This means listeners may not stay until the story's end, which is considered crucial for understanding (Van Limburg, 2009). Attention spans have shrunk from 12 seconds in 2000 to 8 seconds today, but people are more adept at multitasking (Microsoft, 2015). Adapting to changing forces may require getting to the point quickly (Microsoft 2015); and creating immersive experiences across multiple screens (Interviewee 3). In sum, NGOs must wade through endless content to carve out their own niches (Interviewee 15). Storytelling is the only approach that works (Sachs, 2012).

Although few of the NGOs I reviewed are telling immersive stories, many are getting to the point with their communications, as evidenced by homepages that present news headlines alongside short snippets of information (BirdLife website) (BTO website). Most conservation NGOs take a similar approach, though WCS recently launched a new website that positions imagery above news (WCS.org). Strong visuals are increasingly required to capture viewers' attention, and Facebook pushes video content into feeds 360% more than non-video posts (Comm, 2016).

However, the rise of bite-sized content cluttering the web has prompted a long-form storytelling renaissance (Good Magazine, 2011) (Rieder, 2013). Some storytellers, like the producers of *Serial*, champion the slow, focused telling of one story at a time (Serial Podcast). Television is in a golden era marked by complex programmes that depend upon loyal, focused viewers (De Monte, 2013).

In other cases, new media and traditional storytelling fuse, as seen with BuzzFeed's Longform section and the rise of Instagram storytelling—which is even pursued by traditional storytellers like a century-old literary magazine (Wang, 2016). Instagram appears to be photo-centric, but stories are as important as imagery (Ferrer, 2016).

Together, these developments underscore that the media landscape is evolving, often unpredictably. New media and higher user engagement provide opportunity (Pavlik, 2008), but anticipating where storytelling will go in the future is impossible (Higgs, 2014). With that in mind, organisations are advised to remain nimble (Higgs, 2014) and pursue hybrid models merging traditional and interactive media (Pavlik, 2008). To secure the widest reach, storytellers are abandoning single-medium storytelling, instead rolling out different iterations on multiple platforms (Marci, 2015). Doing so may foster efficiency, but publishing numerous versions, especially in a 24/7 media culture, may challenge NGO resources.

Scientist Storytellers

Science and storytelling are more connected than most appreciate: both seek to order the world and widen human experiences (Morrison, 1997). Whether they realise it, conservation NGOs tell stories every day. They utilise narratives when publishing in journals, disseminating press releases, and courting donors. But the science community often undervalues the social sciences and the importance of communication (Olson, 2009) (Jacobson, 2009); additionally, individuals and organisations telling stories about nature and wildlife face unique challenges:

- Conservationists are often trained scientists who have not studied communication, making storytelling unfamiliar or daunting (Olson, 2009);
- Interviewees expressed that communications departments are rarely high on the food chain, often have limited resources, and are often geographically distant from the stories they want to tell;
- Stories require creativity and fluidity, but scientists like caveats (Interviewee 4). They feel the need to give every word meaning (Kroeber, 1992), making scientist storytellers narrative's designated drivers (Olson, 2009);
- Science is seen as objective work, whereas communication seems subjective, even soft, which makes scientists feel uncomfortable (Olson, 2009) or superior (Nash, 1990);
- Scientists, particularly those studying animals, may not want to expend energy communicating with people—especially if such communication is seen as an additional, voluntary component of one's job (Interviewee 5);
- Scientists are accustomed to publishing in academic journals, so their interest in, and ability to write for, mainstream media may be limited (Olson, 2009);
- Stories hinge on emotion (Svoboda, 2015), which scientists resist expressing (A. Gosler, personal communication, 9 June 2016);
- Stories are becoming more concise, but scientists, particularly those with teaching experience, are not adept at brevity (Olson, 2009);
- Finally, even the most charismatic and eager conservation storytellers have to confront the fact that translating complex scientific information may require reframing and simplifying, as echoed by multiple interviewees. The line between accuracy and entertainment is thin and potentially dangerous: compelling yet evidence-informed stories require special care.

Space limitations preclude me from addressing every challenge, so I touch on several while making general observations about obstacles facing scientist storytellers.

Scientists often fail to understand the power of communication (and within it, storytelling), not realising their work only has value if people know about it (Olson, 2009) (Rose, 2010). At the same time, if scientists do not communicate it, someone else

will, and that person may shift or undermine their message (Olson, 2009). To attract donors, conservation NGOs must make their work attractive, which requires savvy communication; and grants are increasingly contingent on NGO communication (Interviewee 3).

Just as conservationists believe that sound evidence fosters sound policy (Sutherland et al., 2004), many scientists believe that facts speak for themselves (Interviewee 10), so they often present their work with presumed authority, even vanity (Sachs, 2012), which can alienate audiences. Likewise, the stronger facts appear, the less storytellers believe they need to build emotional connections (Sachs, 2012). Expressing emotion is key to profound storytelling, but scientists resist it (A. Gosler, personal communication, 9 June 2016). To draw scientists out of their shells, NGOs need to change their work cultures. Just as CCI launched an artist residency, it could host informal gatherings, like its new book club, where staff can discuss creative subjects.

Not only do scientists often tell stories poorly, they rarely identify the fascinating stories arising from their work: Many of the storytellers I interviewed shared frustrating experiences involving scientists who failed to appreciate stories in their midst. But tension cuts both ways. Field researchers are often disrupted by communications staff wanting imagery and updates (Interviewee 5).

If scientists become successful public-facing storytellers, they may alienate their colleagues. Carl Sagan is thought to be the most important scientist to popularise science (Terzian and Bilson, 1997), yet his work came at a cost (Poundstone, 1999). Many scientists disliked him, whether out of envy or snobbery (Poundstone, 1999), and the community punished him by not inducting him into the National Academy of Sciences (Olson, 2009).

Popularisation almost certainly requires simplification, and some scientists equate simplification with reality distortion. Others disagree: David Attenborough thinks natural history can always be explained in simple terms; and programmes like HowStuffWorks and TED similarly believe in making complex topics accessible through short

explanations. Overall, scientist storytellers must be careful not to oversimplify to the point of misleading (Leon, n.d.).

Teaching Storytelling

For my work to have any impact, I must consider whether storytelling can be taught. Most storytelling experts believe that the *art* of storytelling cannot be instructed (Truby, 2007) (Interviewee 3) whereas some of its *structures* can be (Olson, 2009): the basics are teachable, but mastering storytelling takes a lifetime (Denning, 2001).

Almost all interviewees agree with several principles: some scientists are natural storytellers; some can improve through training; and, on the whole, younger scientists are more aware of the benefits of public-facing communication. On the other hand, communication-savvy scientists reiterate that good stories require sound science (Interviewee 5).

Multiple interviewees pointed out that scientists increasingly understand the value of storytelling; and as communication technologies (cameras, editing software, etc.) become more affordable, scientists can more easily tell stories—or at least gather materials that can be transferred to storytelling experts who are better positioned to edit, craft, and disseminate (Interviewee 4). Field biologists often experience things the public cannot access, so they can tell stories that transport audiences. Indeed, evoking wonder is storytelling’s “secret sauce,” and it is equally important that storytellers draw from what they know, using their own values and experiences (Stanton, 2012).

Part V: Next Steps

The choice for leaders... is not whether to be involved in storytelling—they can hardly do otherwise—but whether to use storytelling unwittingly and clumsily—or intelligently and skilfully.

- Stephen Denning

As mentioned in Part I, core elements should not be used in every story. Instead, conservation NGOs must carefully consider when and how to incorporate them, especially when grappling with new media. Without the time or ability to analyse the resources allotted to communications departments, I cannot recommend telling traditional stories versus new media stories, nor can I suggest prioritising particular elements. These decisions can be made both organically and strategically, as evidenced by the case studies. WildCRU could not have anticipated, much less planned, the stories that followed Cecil's death, whereas BTO made a strategic decision to foster engagement through its tracking website.

In addition to exploring core elements, I provide general recommendations that require leadership. NGOs should:

1. Build internal capacity;
2. Create hybrid models and consider working with outsiders; and
3. Experiment with story type and tone.

Internal Capacity

As described above, many scientists lack interest in, and aptitudes for, storytelling. However, scientists increasingly appreciate communication's importance, so scientists will likely experiment with storytelling as time goes on. In the meantime, organisations must consider whether to arm their scientists with storytelling tools, create mechanisms by which experienced communications staff translate scientists' work, or some combination of the two. At the very least, NGO leaders "should ask themselves whether the people in their organisations are the objects of communication or subjects in communication" (Jabri et al., 2008, p. 681).

As previously discussed, nearly all interviewees agree that storytelling can only be taught to a limited degree; and some believe the best path forward involves scientists providing storytelling ingredients to communications staff who can put them together to craft compelling tales. At least with documentaries, editing is the most important step (Interviewee 4).

Regardless, scientists should at least learn basic communication skills since: grants require communication outputs, and journalists want to speak with scientists (Interviewee 6). At the same time, the most authentic and powerful stories are told by individuals who directly experienced the underlying events (Denning, 2000). And conservationists, particularly those working in the field, have immeasurable access to interesting experiences (Interviewee 4). NGOs should identify key members of staff who are heroes and successful storytellers, positioning them for storytelling leadership (Interviewee 3). Notably, conservation storytellers can achieve impactful leadership like the kind exhibited by Theodore Roosevelt by telling personal stories that align with their lifestyles (Redekop, 2014).

To ensure balance between evidence-informed science and compelling storytelling, NGOs can hire scientists-turned-storytellers to work in their communications departments—as many of the organisations I consulted do. The RSPB has a science communications specialist who is a liaison between the two realms (Interviewee 1). Some organizations are creating roles that fuse communications and strategy. WWF UK recently recruited an Advocacy Media Specialist who would “focus on developing strategy and the top-level relationships required to secure a step change” in how the media perceives WWF while developing internal spokespeople (WWF, 2016).

Changing the establishment “may require a transformation of the entire approach, agenda, culture, and ethos of the conservation community” (Bennett et al., 2016, p. 10). Is the conservation community amenable to this sea change? If so, conservationists will need to demonstrate open minds, humility, the ability to listen, and willingness to express different opinions (Bennett et al., 2016).

Hybrid Models, Outside Voices

In addition to expanding internal capacity, NGOs can work with outside voices and create hybrid programmes to bring outside voices in. Olson (2009, p. 71) argues, “science, in itself...isn’t enough for the general public—it’s too cold, too complex ...[it] needs to be partnered with more humanized elements.” A clear example is CCI’s artist residency: outsiders like photojournalist Toby Smith offer fresh ideas; and the arrangement costs less than hiring a professional communications agency (Interviewee 12). Arts also help scientists reach more diverse audiences (Jacobson et al., 2007).

NGOs can also pair arts and science storytelling by, for instance, following the presentation of an artful video with a scientist Q&A (Olson, 2009). On organisational websites, different sections can serve different visitors. The IUCN Red List achieves this with a sub-site that caters to users interested in complex scientific information (Hilton-Taylor, 2016) (IUCN Red List Discover website).

NGOs are learning that public figures can amplify their communications (Williams, 2016). Indeed, reactions to Cecil’s death spiked when American TV show host Jimmy Kimmel tearfully spoke about the event (Macdonald et al., 2016). But outside voices bring opportunity and risk. Positives include: new perspectives; greater room for creativity; and expanded reach. Additionally, by working with outsiders, NGOs can relieve some of the pressures on staff to tell stories. On the other hand, outside voices are harder to control, and public figures more scrutinised. For example, actor Leonardo DiCaprio has become a widely known environmental advocate who speaks on behalf of several NGOs, but the media criticised him when it emerged that he used a private jet to fly 8,000 miles in 24 hours to collect an environmental award (Groetzinger, 2016).

Sometimes, listeners become unwanted outside voices when they misinterpret or alter stories when sharing them (Denning, 2000) (Sachs, 2012). Other times, they fail to heed stories even when they are told clearly, as with *Finding Nemo*. The movie sent a clear message about animals belonging in the wild, yet the film caused a spike in clownfish sales (Dengate, 2016).

Story Type and Tone of Voice

How a story is told may determine its success (Zak, 2013), so NGOs should be strategic about how they tell conservation stories, recognising that storytelling goals and methods may not align with other goals and methods. Inevitably, scientists and communications staff will pursue different priorities (Interviewee 5).

For instance, telling a compelling story to the general public may mean discarding complex information that appeals to scientists. Likewise, writing a blog does not replace publishing in an academic journal. To achieve multiple aims, conservation NGOs should take stories and create bespoke versions suited to various audiences (Interviewee 2). By way of example, BirdLife's communications team knows that its personified, emotional vulture video will not resonate with governments since they respond to health and economic concerns.

Organisations often jump into campaigning and storytelling without considering how to target audiences (MacDonald et al., 2015), but choosing stories and communication methods based on audience is crucial (Jacobson, 2009). When resources allow, organisations should conduct market research (Interviewee 1); at the very least, they can use basic tools that measure web activity to see which stories work best (Interviewee 15).

Like storytelling, leadership is fundamental and universal; and it requires the same features that govern communication (Hackman and Johnson, 2013). Conservation leadership is a relatively new, yet essential, concept (Sandbrook, 2015) (Dietz et al., 2004); as is storytelling leadership. Both were continuously on my mind as I completed my placement. Although I worked almost entirely on my own, I nevertheless showed leadership in choosing a new subject (conservation storytelling), assessing its importance and relationship to leadership, and developing research methods that would allow me to properly analyse it. After completing my report, I reflected on the process, realising that I showed the greatest leadership when framing my analysis.

Conclusion

If history were taught in the form of stories, it would never be forgotten.
- Rudyard Kipling

Conservation cannot succeed without communication (Jacobson, 2009), and stories are powerful tools since they build emotional connections while helping people transfer information (Frank, 2010) (Polkinghorne, 1991) (Rose, 2010) (Verma et al., 2015). This report explores two primary topics—what makes stories compelling, and whether and how conservation NGOs are able to tell such stories—while considering the relationship between storytelling and leadership. It is clear that the two are linked: to enhance storytelling, NGOs must show external and internal leadership; and leadership can be achieved through storytelling.

Conservation NGOs must begin by recognising storytelling’s potential. From there, they can decide how to pursue storytelling that is authentic, compelling, and evidence-informed. Learning about story structure and composition may help untrained communicators, but it is my belief that storytelling is an art, not a science, that few can master. This conclusion parallels my decision to explore, rather than define, the meaning of “story.” I rejected a singular definition, instead identifying seven core elements found in compelling tales. Broadly explaining them was not enough: I needed to explore how they operate in conservation, so I used case studies to tease out benefits and risks.

However, this bird’s eye view precludes me from delivering a road map for NGOs to consult as they move forward. So, just as I exhibited leadership in designing and completing my report, NGOs must show leadership by strategically designing storytelling strategies. Individuals and organisations alike will only achieve profound leadership when their lifestyles and cultures parallel their stories (Redekop, 2014).

One thing is certain: Scientists and NGOs will benefit from better storytelling, and the world will, too. Just as stories about nature inspire appreciation for the natural world (Jacobson et al., 2007), experiences in the natural world inspire creativity (Louv, 2005). It could be argued, then, that stories produce nature-lovers, and nature-lovers produce

stories, both relationships key to a continuous appreciation for, and protection of, the planet.

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Appendices

Appendix 1: Interviewees

| Name | Organisation & Position | Date | Interview Location |
|-----------------------|---|--------------|---|
| 1. Martin Fowlie | RSPB, Media Manager | 16 June 2016 | RSPB HQ, Bedfordshire |
| 2. Jack Plumb | RSPB, Youth Publications Editor | 16 June 2016 | RSPB HQ, Bedfordshire |
| 3. Julian Hector | BBC Natural History Unit, Executive Producer | 24 June 2016 | BBC NHU Offices, Bristol |
| 4. Jeff Wilson | Silverback Films, Producer | 23 June 2016 | Silverback Offices, Bristol |
| 5. Chris Hewson | BirdLife, Senior Research Ecologist | 22 June 2016 | BirdLife Offices, Cambridge |
| 6. Ade Long | BirdLife, Head of Communications | 17 June 2016 | BirdLife Offices, Cambridge |
| 7. Shaun Hurrell | BirdLife, Communications Officer | 17 June 2016 | BirdLife Offices, Cambridge |
| 8. Irene Lorenzo | BirdLife, Communications Officer | 17 June 2016 | BirdLife Offices, Cambridge |
| 9. Luca Bonaccorsi | BirdLife, Head of Communications | 11 July 2016 | BirdLife Offices, Cambridge |
| 10. Sarah Rakowski | FFI, Communications Officer | 18 July 2016 | DAB Common Room, Cambridge |
| 11. Shelley Bolderson | CCI and Cambridge Museum of Zoology, Development Coordinator | 9 June 2016 | CCI Artist in Residence Studio, Cambridge |
| 12. Toby Smith | CCI, Artist in Residence | 19 July 2016 | CCI Artist in Residence Studio, Cambridge |
| 13. Mike Toms | BTO, Associate Director, Communications | 6 July 2016 | BTO HQ, Thetford |
| 14. Ben Hoare | BBC Wildlife Magazine, Editor | 24 June 2016 | Café, Bristol |
| 15. Matt Swaine | University of Cardiff, MA International Journalism, Course Director | 24 June 2016 | Café, Bristol |
| 16. Julia Migne | University of Cardiff, MA International | 30 June 2016 | Skype |

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| | Journalism, Student | | |
| 17. Peter Venn | University of West England, MA Wildlife Film, Programme Leader | 24 June 2016 | Bristol UWE Offices, Bristol |
| 18. Debbie Macklin | Tropical Biology Association, Communications Officer | 25 July 2016 | DAB Common Room, Cambridge |
| 19. Chris Parish | Peregrine Fund, Condor Field Project Supervisor | 16 June 2016 | Skype |
| 20. Masumi Gudka | BirdLife, Head of African Vulture Programme | 16 June 2016 | Skype |
| 21. Malcom Green | Oral Storyteller | 30 July | Email |

Appendix 2: Sample Interview Questions for All Communicators

1. How would you define conservation communication?
2. How does this conception differ, if at all, from conservation storytelling?
3. What role does communication play in conservation?
4. What audience/s are you targeting?
5. What goals are you trying to achieve?
6. How have your and/or the organisation's communication processes, goals, and methodologies changed over time?
7. In the larger realm of conservation communication, have things changed or evolved over time? If so, how?
8. Who within your organisation decides the stories/themes/issues to spotlight via communication?
10. How does that decision-making process work?
11. Is there ever tension between the communications team and, say, field biologists?
12. How do you tell stories that are both evidence-based and entertaining?
13. What new tools are you using to tell stories (video, Instagram, etc.)?

Appendix 3: Placement Description

| | |
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| Host organisation(s) | CCI (arts, science, conservation programme), BirdLife, BTO |
| Host supervisor(s) & contact email address | John Fanshawe john.fanshawe@birdlife.org (CCI & BirdLife); Mike Toms mike.toms@bto.org (BTO) |
| Proposed placement title / topic | Conservation Storytelling: Traditions, Practice, and Innovation |
| General description | <p>Outline: Research and analyse storytelling traditions while parsing out the core features/themes of compelling storytelling. Provide overview of conservation storytelling, paying particular attention to contemporary opportunities and challenges. Illustrate opportunities and challenges by focusing on a handful of case studies.</p> <p>Scope of work</p> <ul style="list-style-type: none"> • Review the roots of storytelling (written, oral, and multimedia), with special focus on environmental/wildlife/conservation stories • Analyse the core themes and features of compelling/successful storytelling. If time permits, this analysis should consider various forms of stories (books, film and television, journalism, etc.) presented to a range of audiences (adults and children, for instance) • Building from the above analysis, explore conservation storytelling, with a particular focus on contemporary trends. How can lessons from successful forms of storytelling help improve conservation communication without eroding the need for evidence-based communication & policy? • Identify the challenges facing contemporary conservation storytelling, as well as opportunities for improvement and creativity. Do so with media form and audience size/type in mind. <p>After gathering/analysing the above information, look at specific case studies that highlight challenges in conservation communication; and depict a range examples of success, creativity, and innovation.</p> <p>Precise studies TBA, but they will range from species-specific cases (such as perceptions of vultures with a comparison of Asian and African species), to theme/medium-specific cases (such as prevalence of spectacle storytelling).</p> <p>Activities</p> <ul style="list-style-type: none"> • Research and synthesize storytelling traditions • Research and synthesize trends, challenges, and successes in |

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| | <p>conservation storytelling</p> <ul style="list-style-type: none"> • Interview storytelling experts, such as Malcolm Green, Julian Hector, Phil Waters, Toby Smith, and Matt Swaine. |
| <p>What is the conservation leadership challenge that the placement will address? This should be a single sentence, phrased as a generic challenge</p> | <p>Taking a strongly arts-based look at story-telling, and shaping responses that respond to, but also encompass, both narrative and evidence-based narrative traditions within conservation will require innovation, and analytical skills that should lead to shaping a better understanding of the field of ‘conservation storytelling’ for CCI partners.</p> <p>Background research will require work with independent storytellers, as well as staff in CCI and other organizations, and will draw on institutional and individual perspectives to shape common ground and language.</p> <p>Although storytelling is often cited as fundamental to conservation success, the placement will tease out key elements that allow NGOs to reach existing and particularly new audiences with their work.</p> |
| <p>What leadership skills will the student develop / demonstrate in this placement?</p> | <ul style="list-style-type: none"> • Learning how to work with a variety of stakeholders at the same time • Ability to review and synthesize storytelling from many angles and traditions • Ability to bring various themes and findings together to make cohesive suggestions for how conservationist community can communicate better |
| <p>Are there any specific skills or characteristics required for this placement?</p> | <ul style="list-style-type: none"> • Strong communications skills • Strong organizational skills • The ability to appreciate/dissect the practice of storytelling from a range of perspectives (and as it impacts various stakeholders) • Familiarity with conservation journalism, the way NGOs communicate their work to various audiences, and an appreciation for storytelling as a human tradition, an art form, and an important tool for advocacy |
| <p>How will the host organisation benefit from the placement? Please detail any anticipated outputs for the host</p> | <ul style="list-style-type: none"> • CCI will learn more about the intersections between storytelling and art, science, and conservation, which directly impacts the program John Fanshawe is developing for the initiative • Since placement will touch upon at least one case study involving bird conservation communications, BirdLife also stands to benefit |
| <p>Location(s) of the placement</p> | <ul style="list-style-type: none"> • Cambridge, with possible visits to interview sites (e.g. Cardiff, for student to interview Matt Swaine, or Bristol, where student might interview Julian Hector, Mary Colwell and Susan McMillan) |

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| | <ul style="list-style-type: none"> • Periodic access to CCI office space—predominantly for in-person supervisory sessions |
| Facilities that will be made available to the student | <ul style="list-style-type: none"> • Contacts and/or e-introductions • Periodic access to CCI office space |
| Estimated total budget (£) | N/A |
| Host organisation contribution to budget (£) | N/A |
| Shortfall that the student would need to find (£) | N/A |