

2025

**Matilda
Carne**

**Inspiring Diverse Environmental Conservation
through Children's Literature. A Case Study in
Illustration.**

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Project submitted to IADE - Faculty of Design,
Technology, and Communication at Universidade
Europeia, to fulfill the requirements necessary to
obtain a Master's degree in Design and Visual Culture,
carried out under the scientific guidance of Professor
Hugo Passarinho, Assistant Professor at IADE -
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Universidade Europeia.

This thesis is dedicated to South Africa, in gratitude for the opportunity to learn from its wildlife, its people, and the intricate connections between humanity and the natural world.

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I would like to thank Professor Hugo Passarinho, for the guidance, knowledge, patience, and being as excited about this project as I am.

Thank you to my father, who passed on to me his love of wildlife and his constant sense of curiosity about the natural world. His inspiration from a young age has shaped who I am today, and I would not be here without him.

Lastly, I thank Lewyn Maefala and the members of the Black Mamba Unit, who welcomed me so generously and shared their culture, experiences, and wisdom throughout this project.

Palavras-chave

Literatura infantil; Ativismo ambiental; Diversidade; Ilustração; Conservação comunitária

Resumo

Esta Dissertação explora como a narrativa visual pode abordar a sub-representação de vozes marginalizadas na conservação ambiental de primeira linha. Historicamente, as comunidades locais têm sido excluídas da conservação influenciada pelo Ocidente, com as contribuições das mulheres sendo especialmente negligenciadas (Tenouri, 2020). A conservação sul-africana é examinada como um estudo de caso, onde as percepções da era colonial sobre o ambiente continuam a ser moldadas pela raça, gênero e poder (Taylor, 2016). A falta de representação visível nos campos ambientais corre o risco de alienar as crianças e limitar as suas aspirações de seguir carreiras na área da conservação.

A solução proposta envolve a criação de um livro infantil ilustrado, narrado em relatos em primeira mão de membros de uma comunidade sul-africana envolvida na conservação e ilustrado com obras de arte originais da autora. No centro desta narrativa estão as Black Mambas, a primeira unidade comunitária feminina de combate à caça furtiva da África do Sul, que servem como poderosos modelos para crianças de origens marginalizadas. Ao partilhar as suas histórias, o livro oferece uma perspetiva autêntica sobre o impacto das mulheres negras na conservação, retratando personagens que se parecem e vêm das mesmas comunidades que os leitores-alvo. Ao focar-se numa questão específica dentro de um contexto localizado, o objetivo é inspirar mudanças significativas a nível comunitário, com a esperança de que esses esforços possam se espalhar e influenciar conversas

mais amplas e globais sobre conservação e representatividade.

A metodologia combina trabalho de campo imersivo com as Black Mambas e colaboração com educadores comunitários, membros e especialistas em conservação para garantir a autenticidade cultural e o valor educativo. Esta abordagem centrada no ser humano apoia a co-construção de narrativas que refletem experiências vividas e fortalecem a ligação entre a conservação e a identidade comunitária.

Os resultados potenciais incluem aumentar a consciência ambiental entre os jovens leitores, aumentar o envolvimento com questões de equidade de género e racial na conservação e promover o empoderamento da comunidade para promover mudanças sociais e ecológicas.

Em última análise, o projeto contribui para o campo do Design e da Cultura Visual, demonstrando o potencial transformador da literatura infantil como ferramenta para a mudança social. Ao traduzir narrativas complexas em histórias visuais acessíveis, procura promover a igualdade de género e racial na conservação e amplificar o impacto da inclusão nos movimentos ambientais para as gerações futuras.

Keywords

Children's Literature; Environmental Activism; Diversity; Illustration; Community Conservation

Abstract

This Dissertation explores how visual storytelling can address the underrepresentation of marginalised voices in frontline environmental conservation. Historically, local communities have been excluded from Western-influenced conservation, with women's contributions especially overlooked (Tenouri, 2020). South African conservation is examined as a case study, where colonial-era perceptions of the environment remain shaped by race, gender, and power (Taylor, 2016). The lack of visible representation in environmental fields risks alienating children and limiting their aspirations to pursue conservation careers.

The proposed solution involves creating a children's illustrated book, narrated in first-hand accounts from members of a South African community engaged in conservation and illustrated with original artwork by the author. Central to this narrative are the Black Mambas, South Africa's first all-female, community-based anti-poaching unit, who serve as powerful role models for young children from marginalised backgrounds. By sharing their stories, the book provides an authentic perspective on the impact of Black women in conservation, portraying characters who look like and come from the same communities as the intended readers. By focusing on a specific issue within a localized context, the aim is to inspire meaningful change at a community level, with the hope that these efforts can ripple outward to influence broader, global conversations around conservation and representation. The methodology combines immersive fieldwork with the Black Mambas and collaboration with community educators,

members, and conservation experts to ensure cultural authenticity and educational value. This human-centred approach supports the co-construction of narratives that reflect lived experiences and strengthen the link between conservation and community identity.

Potential outcomes include raising environmental awareness among young readers, increasing engagement with issues of gender and racial equity in conservation, and fostering community empowerment to enact social and ecological change.

Ultimately, the project contributes to the field of Design and Visual Culture by demonstrating the transformative potential of children's literature as a tool for social change. By translating complex narratives into accessible visual storytelling, it seeks to promote gender and racial equality in conservation and amplify the impact of inclusion within environmental movements for future generations.

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LIST OF ABBREVIATIONS

| |
|-------------------------------------|
| BM – Black Mambas |
| NGO – Non-Governmental Organisation |
| KNP – Kruger National Park |
| APU – Anti-Poaching Unit |
| PAR – Participatory Action Research |
| HCD – Human-Centred Design |
| ECD – Environmental Centred Design |
| IWT – Illegal Wildlife Trade |

INTRODUCTION

The exclusion of Indigenous and local communities from conservation efforts is a widespread issue, as many communities around the world have been displaced, marginalized, or restricted from accessing their ancestral lands in the name of environmental protection (Mowforth, 2019). Furthermore, while precise data is limited, it is acknowledged that women make up only 3–11% of the global ranger workforce, with notable differences depending on the region (Belecky, M., Singh, R., & Moreto, W., 2019). This underrepresentation has far-reaching implications. It not only limits the visibility of marginalized women's contributions to conservation but also highlights the layered nature of exclusion - where women from local communities are often doubly marginalized by both gender and systemic barriers tied to race, class, and colonial histories. These overlapping exclusions reflect a broader pattern of inequality that has historically contributed to tensions between local communities and Western conservation institutions, ultimately undermining the development of inclusive, community-led conservation efforts.

Role models are a frequently mentioned source of inspiration for career choices and can be defined as “individuals who provide an example of the kind of success that one may achieve, and often also provide a template of the behaviours that are needed to achieve such success” (Lockwood, 2006, p. 36). Research has suggested that role models can enhance an individuals’ motivation and shows that when children see themselves reflected in their idols, they are more likely to imagine similar paths for their own futures (Gibson, 2004). The scarcity of female role models of colour in conservation creates a gap, particularly for young girls of colour, who are often deprived of accessible idols in these male-dominated and predominantly white fields.

Then, the problem that this project aims to solve was defined: how visual culture and design can be used as a tool to narrow the gender and racial gap in conservation roles and serve as a bridge of inclusion for younger generations from local communities bordering western conservation ideals. Based on this problem, a research pathway was created where the concepts that supported the development of this project were selected.

This thesis project addresses this through a collaborative children’s illustrated book, developed with South Africa’s Black Mambas, the world's first all-female anti-poaching unit. The Black Mambas, composed of black female rangers from local communities, are internationally recognized for their efforts to combat wildlife poaching and protect endangered species. Their

dedication to environmental stewardship makes them powerful role models for children, particularly those who rarely see women who look like them in leadership conservation roles. This project aims to bring their stories to life directly from their own perspectives, with the Black Mambas as narrators sharing their first-hand experiences in anti-poaching efforts. Through illustration and storytelling, the project seeks to raise awareness of the important contributions these women make to conservation while providing young readers with relatable, inspiring role models.

The primary outcome of this thesis is a children's illustrated book that authentically reflects the Black Mambas' impact in the nature reserve they patrol in. In addition, this project includes direct insights from the Bush Babies Environmental Education Program, a sister initiative dedicated to community led education and engagement, with long-term inclusive conservation goals.

The researcher's main goal and responsibility is to transform these narratives into engaging visual stories, making conservation themes accessible and impactful for young readers from communities, who neighbour the National Parks they have been historically excluded from. This collaboration not only brings visibility to the Black Mambas' work but also demonstrates the potential of children's literature to foster inclusion, awareness, and empowerment through diverse representation.

By foregrounding the stories of native women in conservation, this project contributes to the fields of Design and Visual Culture as well as children's literature. It seeks to show that children's books are more than entertainment; they are powerful tools for social change, capable of shaping young minds and challenging stereotypes. Ultimately, this research advocates for a more inclusive approach to storytelling in children's literature - one that highlights the work of underrepresented voices, encourages diverse environmental awareness, and empowers young readers to envision themselves as part of the fight for conservation.

THE AUTHORS MOTIVATIONS

The author's connection to South Africa and experiences in the African bush developed since childhood which cultivated a lifelong passion for wildlife and conservation. During their 2020 field guide course in the Kruger National Park, it became apparent the stark lack of representation in the conservation industry. The group the author trained with was

predominantly white and male, mirroring the systemic barriers that have historically excluded native communities, and particularly women of colour, from these roles.

It was during this time the author first encountered the Black Mambas. Witnessing their work left a lasting impression. These women aim not only to break barriers in a male-dominated field but to also challenge the socio-economic norms that have long confined conservation work to white, middle-class male, Western idealised spaces.

THE PROBLEMATIC OF THE PROJECT

In the lack of visibility of women from marginalised communities in conservation, visual culture is essential for younger generations of all backgrounds to see a diversity of idols in powerful roles to encourage future environmentalists. In this context, the problem is how Visual Culture and Design can be used as a tool in narrowing both the gender and racial gap in conservation roles and serve as a channel for fostering environmental awareness and inclusion among younger generations from marginalised backgrounds.

CHAPTER 1. REPRESENTATION IN CONSERVATION

1.1. Conservation. A definition.

National Geographic Society (2025) defines conservation as the responsible protection of natural resources to ensure their sustainability for future generations, encompassing the preservation of species, genetic diversity and ecosystems, while also protecting the essential functions of the environment. While conservation efforts typically emphasize the protection of living organisms, they are inherently linked to the well-being of non-living environmental elements such as soil, water and air, as without maintaining these essential abiotic components, sustaining life itself would be impossible (Tenouri, 2019). In this dissertation, the term “conservation” encompasses the protection and management of both living organisms and the physical environment that supports them.

Environmental conservation is crucial for maintaining biodiversity and ecosystem health and encompasses a wide range of areas of expertise. As a multidisciplinary field, conservation can take many forms. Some professionals focus on habitat restoration, working to rehabilitate degraded landscapes, while others prioritize wildlife protection to ensure species survival. Certain efforts centre on mitigating human-wildlife conflict, while others emphasize sustainable resource management to balance ecological needs with human livelihoods. Additionally, some conservation strategies rely on government policies and scientific research, while others rely on grassroots movements and community-led initiatives to cultivate long-term environmental protection.

The current loss of biodiversity is directly linked to species extinction, one of the most critical consequences of the overexploitation our world is experiencing right now. Although extinction is a natural phenomenon, the speed at which it is occurring today is unprecedented. National Geographic Society (2025) examined how the current extinction rate is nearly a thousand times higher than the natural baseline indicated by the fossil record, with some scientists even warning that we are in the midst of a mass extinction event, whereby 75% or more of Earth’s species could disappear within a relatively short period (National Geographic Society, 2025).

Although there have been successes in conservation, global wildlife populations have declined by 60% since 1970 (WWF, 2018). One of the primary defence mechanisms built to fight against the planet's biodiversity loss is the creation and large-scale growth of protected areas. The

concept of conservation through protected areas has deep historical roots, evolving from hunting reserves to wildlife sanctuaries and national parks. But only in recent decades has the creation of protected areas expanded into a global enterprise, whereby the conservation of biodiversity has gained momentum due to both its intrinsic ecological importance and its financial interest (Colchester, 1994).

As of February 2025, the World Database on Protected Areas (WDPA, 2025) reported a total of 303,313 protected areas worldwide, covering 17.6% of the Earth's land and inland waters, and 8.4% of ocean and coastal areas.

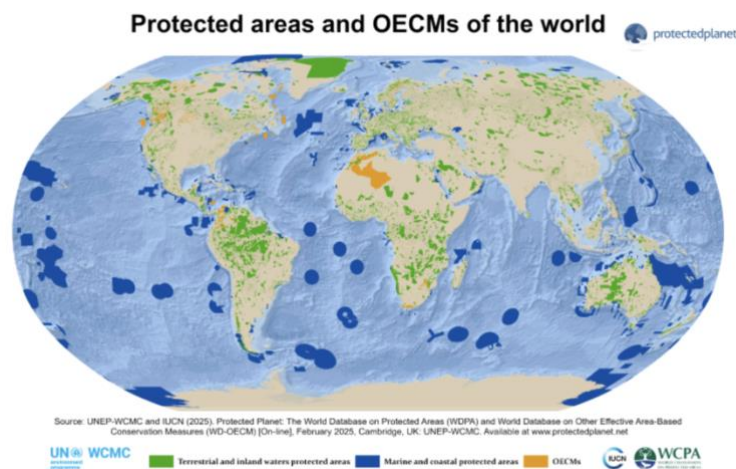


Figure 1. UNEP-WCMC (2025). Map of Protected Areas and OECM's, August 2025.

Retrieved at www.protectedplanet.net

Protected areas have long been essential for biodiversity conservation, but they also bring about conflicts due to the complex intersection of environmental protection, human rights, and social justice:

“Protected areas are controversial. To many they are essential because their restrictions on natural resource use conserve biological systems that will otherwise be depleted, degraded or destroyed. To critics, protected areas threaten peoples’ rights and livelihoods, allowing access for some people but excluding others. Protected areas’ distribution of fortune and misfortune lies at the heart of their controversies” (Brockington and Wilkie, 2015, p.1).

Taylor (2016) argues that the lack of diversity in conservation stems from a deeply rooted colonial perception of the environment, shaped by intersecting issues of race, gender and power.

Since this dissertation is conducted in collaboration with a South African NGO, the following subchapter will focus on conservation politics within South Africa. However, it is important to recognize that the exclusion of Indigenous and local communities from conservation efforts is a global issue, with many communities worldwide displaced, marginalized, or denied access to their ancestral lands in the name of environmental protection (Mowforth, 2019). In post-Apartheid South Africa, racial and gender inequalities in conservation remain persistent (Musavengane & Leonard, 2019), reflecting broader global trends. Across the world, Indigenous communities continue to experience restricted land access, exclusion from decision-making, and socio-economic marginalization, as conservation policies often prioritize Western scientific and economic interests over Indigenous knowledge systems (Koot, 2023).

1.2. The exclusion of local communities in South African conservation.

Carruthers (1995) suggests that a 'National Park' serves as a significant cultural role by physically representing the aspects of the natural world that a country deems valuable enough to protect, inspiring appreciation for the nation's natural heritage beyond political boundaries. As a result, a national park is more than just a designated space of protected ecosystems and species - it reflects societal values and stands as a powerful symbol of national identity. South Africa is often defined by two dominant historical narratives: its past system of apartheid and its dedication to wildlife conservation, epitomized by the Kruger National Park. While apartheid is widely condemned as a system of violent segregation and extreme human rights violations, conservation - particularly the establishment of national parks, is generally seen as an inherently positive endeavour and morally correct (Carruthers, 1995). The Kruger National Park became a powerful national symbol, representing values of environmental stewardship and ethical responsibility (Ramutsindela, 2004). However, this perception too often overshadows the historical and ongoing consequences of conservation policies, particularly for local communities.

The image of South African iconic lands abundant with wildlife aligned with colonial Western ideals of 'untouched' wilderness, leading to the creation of game reserves and national parks - including Kruger National Park, in the late 19th century. In the process, Indigenous people were forcibly and often violently removed from their ancestral lands (Adams, 2004). The prevailing belief that conservation is solely about preserving untouched wilderness has made many conservationists hesitant to recognize the fact that most of these protected and 'wild' areas are,

and have historically been inhabited (Colchester, 2003). The fencing of national parks frequently stripped local communities of their rights to natural resources, restricting their ability to gather food, medicinal plants, fish, hunt, collect wood and to allow their livestock to graze. Abruptly, they were unwillingly transformed from hunters and cultivators into "poachers" and "squatters" (Colchester, 1994). International conservation organizations and the post-apartheid national government have systematically disregarded the rights of rural communities to their ancestral lands and natural resources, whereby Pimbert and Pretty (1997) examined how this long-standing denial has not only been a major source of conflict but has also significantly diminished local communities' access and motivation to participate in conservation efforts for the lands from which they have been actively excluded.

‘In the African version of wildlife conservation history, the experience has been that game reserves are white inventions which elevate wildlife above humanity and which have served as instruments of dispossession and subjugation [...] either their presence [*native people*] was suffered as squatters or 'courageous and loyal native rangers', or they were cast in the role of 'evil, cruel poachers' who were able to stave off wage labour by living off the land' (Carruthers, 1995, p.101).

Despite today's post-apartheid shift towards a more inclusive South Africa, the exclusion of local communities from conservation efforts persists, revealing a continuity between colonial-era policies and modern conservation (Musavengane & Leonard, 2019). These exclusionary practices persist through what some scholars term a "Green Apartheid" (Büscher, 2022). Büscher (2022) argues that contemporary conservation efforts in South Africa continue to reinforce racial and economic inequalities under the guise of environmental protection. Despite the rhetoric of inclusive conservation, many of these protected areas are controlled by wealthy, predominantly white, landowners who benefit from ecotourism revenues while nearby communities face restricted access to land and natural resources (Büscher & Fletcher, 2020). One of the key issues is the economic marginalization of local communities who reside on the borders of conservation areas, such as the Kruger National Park. Historically dispossessed of their land, these communities now experience conservation as an extension of exclusion rather than a source of opportunity, where employment in conservation-related industries is often limited and low waged, offering little long-term economic security (Cock & Fig, 2000). Many children who grow up in these bordering towns have never seen the wild animals these conservation parks strive to protect, denied by the costs of entering the park along with the

above notions of ‘Green Apartheid’ (Musavengane & Leonard, 2019). This creates a further gap between the local community and wildlife, reinforcing the notion that conservation is an exclusive domain reserved for the white tourist and researcher, rather than something that includes or benefits local people (Cock & Fig, 2000; Ramutsindela, 2004). As a result, many young people in these communities grow up with little personal connection to wildlife, limiting their interest in conservation careers and perpetuating the underrepresentation of Black South Africans in this field (Musavengane & Leonard, 2019). This disconnect also fuels resentment and perceptions that conservation areas prioritize wildlife over the well-being of local people, exacerbating tensions between conservation authorities and communities living at the park’s borders (Büscher, 2022). These constraints reflect broader patterns of conservation governance, where local communities remain excluded not only from the economic benefits of conservation but also from having a meaningful role in shaping conservation policies that directly affect their lives (Koot, 2023)

There have been efforts to address these inequalities. Community-based conservation initiatives have been growing in numbers to promote more inclusive conservation practices (Reid et al., 2004). While these initiatives signal progress, they remain limited in scale. Meaningful transformation in conservation governance requires a shift from top-down approaches to models that prioritize local involvement, decision-making and equitable economic benefits (Büscher & Ramutsindela, 2016). Without addressing the deep-rooted inequalities in conservation management, the consequences of exclusion will continue to shape South Africa’s conservation landscape.

1.3. Gender in conservation.

Despite the growing recognition of the need for diversity and inclusion, gender disparities remain deeply entrenched in the field of conservation, whereby women continue to be underrepresented (James et al., 2023). Conservation has long been shaped by patriarchal structures that prioritize masculine-coded skills and roles, reinforcing barriers that prevent women from fully participating in environmental protection efforts (Bossert et al., 2023). While gender inequality affects many sectors, conservation presents unique challenges due to its historical and cultural associations traditionally linked to masculinity (Lau, 2023). A major consequence of this imbalance is that conservation policies and programs often fail to consider the specific needs and contributions of women. Women frequently hold invaluable ecological

knowledge and play critical roles in community-based conservation efforts, yet their voices are often overlooked (Fauna & Flora International, 2023).

One of the starkest examples of gender imbalance in conservation is within the ranger workforce, a critical sector responsible for protecting biodiversity, enforcing conservation laws, and engaging with local communities. Women constitute less than 11% of the global wildlife ranger force, illustrating the pervasive exclusion of women from frontline conservation roles (Seager, Bowser, & Dutta, 2023). Wildlife protection and anti-poaching efforts have been seen as male-dominated activities, requiring physical endurance, paramilitary-style training, and long periods away from family - factors that have been used to justify the exclusion of women due to heavy gender stereotypical norms (James et al., 2023). The *Life on the Frontline* (2019) report further emphasizes the urgent need for gender equity, documenting the specific challenges female rangers face, including workplace harassment, lower pay, and limited career advancement opportunities compared to their male peers. Additionally, women are often expected to balance their professional responsibilities with domestic roles, further limiting their ability to fully participate in conservation work (Bossert et al., 2022).

Addressing these disparities is crucial, as research has shown that gender-inclusive conservation strategies can improve both conservation outcomes and community relations (Universal Ranger Support Alliance URSA, 2021). In rural communities, women often hold crucial ecological knowledge and deeply rooted family influence that play critical roles in natural resource management, particularly in local food systems, water security, medicinal plant wisdom, and family upbringing (Meinzen-Dick et al., 2019).

Confronting these disparities requires an active commitment to gender-sensitive policies, equitable representation, and the dismantling of deeply entrenched power structures. This lack of female representation in leadership positions means that these challenges are rarely addressed at an institutional level, further entrenching the cycle of gender inequity in conservation. Promoting women's leadership in conservation, ensuring fair access to resources, and integrating gender perspectives into conservation strategies are necessary steps toward more inclusive and effective conservation efforts (Binet et al., 2016). While progress has been made in some areas, much remains to be done to ensure that conservation is truly inclusive and reflective of the diverse communities it seeks to serve (Belecky et al., 2019).

1.4. The importance of early role models for inspiring career choice.

The influence of role models can play a key role in shaping individuals' career paths, defined as "individuals who provide an example of the kind of success that one may achieve, and often also provide a template of the behaviours that are needed to achieve such success" (Lockwood, 2006, p. 36). Children are more likely to picture similar futures when they identify with their role models on a deeper level (Gibson, 2004).

When young people encounter professionals who share their gender, race, or socioeconomic background, it can reinforce the belief that they, too, can succeed in that field (Bandura, 1986). The impact of visible role models in fostering career aspirations has been well-documented across disciplines, such as research conducted by the likes of Lockwood (2006) and Cheryan et al. (2017) who demonstrates that exposure to relatable and successful figures in specific careers can significantly influence a child's perception of their own potential. This is particularly critical in fields where underrepresentation is a known barrier to entry. Insight from the previous subchapters suggests that conservation remains a field where women, particularly native women, are underrepresented. As highlighted by Seager, Bowser, and Dutta (2023), the conservation sector has historically been framed through colonial and patriarchal lenses, where community members have been sidelined in leadership and decision-making roles. This lack of visibility not only limits career aspirations among young people but also reinforces systemic exclusions within the field. As stressed by the Universal Ranger Support Alliance (2021), increasing the visibility of women in ranger roles is a crucial step in fostering gender equity within the sector.

Children's literature has a profound impact on shaping aspirations and broadening career possibilities (Bandura, 1986), making it a crucial medium for introducing underrepresented groups to fields where they have historically been excluded. This leads directly to the next chapter, which explores the role of illustration as a tool for storytelling, identity formation, and social change. Through visual narratives, children's illustrated books have the capacity to challenge stereotypes, foster a sense of belonging, and cultivate new generations of inclusive conservation leaders.

CHAPTER 2. THE TOOL OF ILLUSTRATION

2.1. Illustration. An historical review.

From prehistoric caveman drawings to today's advertising panels, where there is human activity there are narrative images telling their stories.

Illustration is the earliest known form of visual communication, dating back 40,000 years to the time when Paleolithic societies inhabited the earth (Male, 2019). Before the invention of writing and alongside spoken language, drawings were the only means of communicating and preserving stories. Illustration emerged as a way to interpret the world, enabling our ancestors to document, depict, and convey the complexities of life (Zeegan, 2009). Male (2024) describes illustrations then and today as one the most omnipresent languages: it is seen by everyone everywhere, communicating anything. Illustration informs, educates, and imparts knowledge while also provoking thought and influencing opinion, it serves as a tool for persuasion, advertising and promotion, as well as documenting and witnessing events throughout the centuries...as a *storyteller*, it brings narratives to life, enhances cultural expression, shapes identities, and fulfills society (Male, 2024, p.6).



Figure 2. Lascaux II (replica of the original cave). Photo by Francesco Bandarin, 2006.

Illustration uses visual means to clarify or enhance the understanding of a subject, and this can take countless forms and cater to diverse audiences. ‘The etymology of this term makes perfect sense: the word illustration comes from the Latin root “illustrare” which means “to make bright or to illuminate.”’ (Doyle, Grove, Sherman, 2018, p.2). Illustrations span a vast range of styles,

from highly informative and data-rich infographics to creatively nuanced comic books. Despite their diversity, they all share a common goal: to communicate. Each illustration functions as a collection of visual symbols, thoughtfully arranged to clarify a subject, whether through straightforward, metaphorical, or evocative expression (Doyle, Grove, Sherman, 2018).

To the date of the document we now write, the earliest documented illustrations are prehistoric cave paintings, with some of the oldest known examples found in the El Castillo Cave and the Cave of Maltravieso in Spain, dating back at least 40,000 to 64,000 years (Serrano, 1958). Cave paintings of this era have since been discovered all over the globe, predominantly featuring animals that early humans would have come across, whilst the depiction of human drawings were quite rare. Fascinatingly, recent research suggests that Paleolithic people did not actually reside in caves and instead were likely used as designated spaces for gathering knowledge, engaging in cultural practices, or receiving instructions (Male, 2014). In this sense, such caves and other similarly adorned natural sites may have functioned as early cultural hubs, much like our libraries and schools today. Later civilizations advanced their communication methods, integrating structured writing and illustrations alongside widely spoken languages. One of the earliest known examples of hieroglyphic inscription appears on the Narmer Palette, an ancient Egyptian artifact dating back to 3100 BCE - whereby the Egyptians relied on this visual communication system for nearly three millennia, using a combination of symbols, signs, and pictorial imagery to convey written text, rich symbolic meaning, and storytelling (Male, 2014).



Figure 3. Palette of King Narmer, Predynastic, c. 3000–2920 B.C.E., slate, c. 64 cm × 42 cm, Egyptian Museum, Cairo.

Illustrations started changing the world on a mass scale throughout the rising and expanding empires of the likes of Egypt, Rome and Greece. To maintain authority and public approval, rulers relied heavily on propaganda and nationalistic pride to both impress and control the people, whereby illustration played a crucial role in reinforcing these ideals, such as designing grand monuments adorned with sculptural reliefs, murals, and visual narratives, serving as constant reminders of the ruling power and instilling a sense of gratitude and loyalty within society (Male, 2019). From 345CE onwards, printing technology arose and the boom in the production of books emerged. Readily available information and documentation on a mass level was created, encompassing diverse and detailed illustrations of maps, natural history, medical science, travel, mathematics, astronomy...the thirst for enlightenment and new knowledge was abundant (Male, 2014).

A golden era of illustration unfolded when illustrators held a level of influence that Zeegan (2009) describes as difficult to grasp today. By the late nineteenth century, publications and their illustrations were the primary source of entertainment for the public, continuing into the early twentieth century, whereby illustrators became key cultural commentators, they contributed to shaping public perceptions of national and international events, as well as influencing taste, morals, humour, and consumer behaviour (Zeegan, 2009). As newspapers and magazine publishing expanded, illustrated periodicals such as *Punch* (1841–2002 in the UK) and *Puck* (1871-1918 in the United States) played a crucial role in popularizing satirical and political cartoons, shaping public opinion through visual storytelling. In Portugal, *O Mosquito* (1936-1953) was a significant illustrated magazine, particularly influential in the development of comic art and graphic storytelling. Simultaneously, the growing demand for large-scale film posters and record sleeves cemented graphic imagery as a defining feature of pop culture, blending commercial appeal with artistic innovation.



*Figure 4. Puck Wants "A Strong Man at the Head of Government"—But Not This Kind. (1880).
Joseph Keppler Puck, Lithograph*

Today is known as the Communication Age (Male, 2024), whereby the art of Illustration has reached an unprecedented level of diversity in its application, context, and visual language, reinforcing its expanding influence and prominence within the realms of creativity in communication. As one of the most omnipresent forms of visual language, it is deeply rooted into teaching, publishing, marketing, and promotion across various media, including animation, print, film, digital platforms, and interactive technology. Illustration possesses the unique ability to convey messages on virtually any subject, an immediate visual representation open to the observer's interpretation (Quli, 2020). Illustration has played a crucial role in shaping the visual identity of each decade since its inception, capturing the full spectrum of the human experience.

2.2. Illustration in picture book storytelling.

Illustration is considered a 'code' or a 'language' because it is a visual representation that has its own rhetorical elements and depends on 'recognizable visual conventions such as mimicry, composition, style, and other attributes to convey meaning' (Doyle, Grove and Sherman, 2019; Grove, 2013). But when an illustration is presented alongside written text, both the visual and verbal elements convey the message through their distinct characteristics. How, then, do these distinct modes of communication achieve such cohesive meaning?

Here we will be looking at the example of a picture book, as this is the end goal of the thesis project. In the following chapters, we will investigate more thoroughly what literature and more specifically what children literature is - but before this, let us investigate the power of illustration in a picture book.

Many authors argue that the core of a picture book lies in the interaction between text and illustration, whereby the relationship between these two forms of storytelling is intricate and nuanced. Sipe (1998) describes this as a synergistic relationship, through which the picture book would be incomplete without one another: 'the total effect depends not only on the union of the text and illustrations but also on the perceived interactions or transactions between these two parts' (Sipe, 1998, p.99). The way we engage with written language and visual art affects how we interpret their relationship in picture books. Sipe (1998) suggests that visual images have a spatial nature which encourages us to pause, observe, and contemplate, forming a timeless structure. Whereas Lewis (1982) argues that verbal narratives, which unfold over time, create a desire to continue reading - coining the term 'narrative lust'. This creates a tension between the impulse to linger on illustrations and the need to follow the story's linear progression, so while the text propels the reader forward, illustrations invite them to stop and absorb the visual details.

In children's picturebooks, the interaction between text and image differs slightly, as young readers tend to prioritize visuals over written language (LeMen, 1992). Reading picture books is often a shared activity, where adults read aloud while children listen and focus on the images, or an independent experience, where children engage primarily with the illustrations, sometimes without reading the text. As a result, images in picture books go beyond simply complementing or interpreting the text - they are essential to the storytelling process and play a crucial role in shaping the identity of characters (Sitzia, 2018), and due to children's quicker attention spans, limited vocabulary, and developing world knowledge, illustrations help convey plots and character development using fewer words and simpler syntax. Fang (1996), suggests that illustrations act as first-order symbols, representing familiar, concrete experiences that children can easily relate to, while words function as second-order symbols, being more abstract and detached from direct experience. By pairing illustration with text, picture books enhance comprehension, preventing the text from becoming too decontextualized (Nodelman, 1996). Beyond comprehension, picturebooks allow engagement in children's imagination, sparks curiosity, and enriches their vocabulary, contributing to discussions and deeper learning.

CHAPTER 3. LITERATURE REVIEW

3.1. Children's Literature. A definition.

Searching for a clear definition of children's literature is a topic that many critics do not seem to fully agree on. Firstly, let us briefly visit what 'literature' is, as although 'children's literature' may have the word 'children' in it, it is nonetheless defined by an inherent imbalance: adults oversee every aspect of its production and distribution, while children are its intended audience (Zanfabro, 2017).

"Literature is a vital record of what men have seen in life, what they have experienced of it, what they have thought and felt about those aspects of it which have the most immediate and enduring interest for all of us. It is thus fundamentally an expression of life through the medium of language." (Hudson, 2009, p. 10).

Language serves as the foundational tool that literary writers use to express their artistic perspectives, enrich their understanding of the world, and explore self-discovery, and as argued by Junaid (2017) is why literature is fundamentally defined by language. Thus the notion of literature is constantly changing and evolving throughout decades and cultures, becoming a difficult concept to precisely define, but as suggested by Krystal (2014) 'means not only what is written but what is voiced, what is expressed, what is invented, in whatever form' (p.3), creating a literary umbrella of comics, films, music, poetry, photography, maps, speeches, books...anything that marks a record of a human beings time on earth, presented in verse or prose, skilfully blending insights from the past with a deep understanding of the present, crafted into expressions of language (Kystal, 2014). Literature surrounds our day to day life as soon as we are born, we unconsciously internalise its messages in a subliminal manner, and as stated by Thacker and Webb (2020): 'a definition of literary history as a means of exploring the ways in which literature articulates the relationship between the individual and society cannot ignore the literature written for children' (p.3).

Then, when does Literature become *Children's Literature*? Lesnik-Oberstein (1999) suggests that it is a category of communication that relies and exists solely on the dependents of its specific audience: children. Oby (2010, as cited in Junaid, 2017, p.111) follows this theory by arguing that children's literature relies on 3 criteria: the protagonist's age, the complexity of themes and the moral purpose. He suggests that the first consideration - whether the

protagonists are children or teenagers, lends to a deeper connection between the story and the child. The second criteria is the complexity of themes, including ideas, relationships, and language, whereby it is considered children's literature if these elements are straightforward, but if they are overly complex, whether in oral or written form, it cannot be classified as written for children (Oby 2010). Lastly, children's literature most often serves the purpose of imparting moral lessons (Oby 2010), which we will come back to in the following sub-chapter.

According to Junaid (2017, p.112), another key distinction between children's literature and adult literature is the heavy presence of illustrations, which are considered a valuable tool for fostering children's literacy. "Children *like* pictures and children *need* pictures."(Nodelman and Reimer, 2003, as cited in Junaid, 2017, p. 112) This emphasizes the importance of illustrations in literacy development, which is further argued by Doonan (1993, as cited in Junaid, 2017, p. 112) who suggests that young readers often engage with pictures first, then the text, and then revisit the images to reinterpret them in light of the words, highlighting the reciprocal relationship between text and illustrations.

Lewis (2001, as cited in Junaid, 2017, p. 112) also argues that children's interaction with picture books differs significantly from adults, that children born in the early 21st century are exposed to an unprecedented volume of visual media, giving them a sophisticated understanding of visual imagery. Kiefer (1993) supports this theory by suggesting that constant exposure shapes how children engage with picture books, where they tend to focus on details in the illustrations, unlike adults, who often overlook these accompanying visual elements. Bader (1976) describes an illustrated picture book as a combination of text, illustrations, and overall design, it is simultaneously a manufactured product, a commercial item, and a social, cultural, and historical artifact, but most importantly, it offers an experience for a child. She also highlights that, as an art form, it relies on the interplay between words and images, the visual presentation of two facing pages, and the dynamic engagement created by turning the page. Nikolajeva and Scott (2001, p.262) claim that picture books uniquely blend the imaginative and the symbolic with the visual and the conventional, accomplishing what no other literary form has achieved. Stewig (1992, p.12) identifies three stages in the development of picture reading as part of children's multiliteracy, which is bringing, examining and extracting:

1. **Personal Interpretation:** Drawing on their own background knowledge and experiences to interpret the elements of the text.

2. **Analysing Context:** Exploring individual visual elements for clues within the broader context, akin to understanding vocabulary within sentences.
3. **Deriving Meaning:** Using textual clues to uncover the author's intended meaning through the words and sentences.

Picture books inherently blend text and illustrations, and as argued by Nodleman (1990) this offers a layered experience where the words suggest that things aren't always as they seem in the images, while the images add depth beyond the text. He continues by suggesting that this interaction creates an ironic tension that enriches the narrative and underscores the limitations of both text and images in representing reality (Nodleman, 1990). By highlighting these contrasts, picture books prompt readers to recognize the distortions in how the world is portrayed, in which this critical awareness empowers both children and adults to approach and interpret representations of the world with greater thoughtfulness, promoting individuality and independent thinking rather than conformity (Nodleman, 1990).

And yet on the other hand, Zanzabro (2017) states that children's literature is shaped by adults' perceptions of its intended audience and their role in society, and thus children's literature functions as a culturally embedded form of discourse which involves political concerns: 'the child, however problematically, represents the future, and perpetuating a given ideology necessitates that children inherit its value' (Pugh, 2011, p.3). As stated by Haruna-Banke and Ozewe Banke (2017), the children of today will become the adults of tomorrow, making their upbringing and education crucial to the society they belong to and consequently vital for their society to carefully consider the messages conveyed to them through literary materials and the impact on their perceptions and decision-making.

3.2. Gender and Racial Diversity in Children's Literature.

'Children's books are read by adults and children, so the books do not have one meaning. As texts with dual (or multiple) audiences, children's stories hold more than one meaning' (May, 1983, p. 55). The nature of this multiple audience implies that these stories can carry diverse meanings, interpretations, and messages, depending on who is reading them and how, resulting in the authors of children's books carrying a type of moral responsibility to their readers, whereby they must consider the impact their work could have on young minds (Flanagan, 2010: p. 37).

Education is a high-powered tool, and children's literature is a vital component in shaping and enriching a child's learning experiences, by which Politis (2022) argues that gender has long been regarded as a fundamental concern in the realm of this literature. He suggests that since children are highly impressionable and absorb the values and ideas presented in their reading, literary works for young audiences go beyond mere entertainment - they also serve as a mirror of society, with a particular emphasis on uplifting and representing marginalized people (p.130). Jean K. (2007, cited in Haruna-Banke and Ozewe Banke, 2017, p.72) argues that gender stereotypes persist because society treats them as normal: adults, shaped by these stereotypes, go on to create children's books in which their ingrained views, whether consciously or unconsciously, are reflected in the stories they write. Flanagan (2010) proposes that to help children view masculinity and femininity as interconnected and flexible rather than strictly binary and oppositional, writers, readers, and critics must recognize how specific genres are associated with gender. He argues that they should also consider how narrative discourse can reinforce certain gender models and examine how texts either support or challenge prevailing cultural ideas about gender (Flanagan, 2010).

Many studies have been carried out throughout the past several decades focusing on gender stereotypes found in children's picture books, one of which is Chamberlain's (2011) quantitative content analysis of 43 Caldecott Award and Honor-winning children's picture books, examining whether the illustrations perpetuate gender stereotypes. The study found that males were depicted in leadership roles or exhibiting leadership behaviour 60% more often than females, whilst females were shown engaging in nurturing behaviours 9% more frequently than males. Additionally, males were portrayed in a broader range of occupations, and also appeared as the majority of main character roles that were *occasionally* shared with female characters (Chamberlain, 2011, p.28). This limited depiction of women in nontraditional gender roles reinforces stereotypes and ingrained gendered behaviours, whereby Scholars of Gender Schema Theory (GST) argue that gender disparities in both text and imagery can instil a sense of entitlement in boys while diminishing self-esteem in girls (Koss, 2015, p.37).

There have been continuous studies conducted into the lack of racial and cultural diversity in children's books, resulting in a harmful impact on young readers - especially those who rarely encounter their cultural identities represented in books (Short, 2018). Bishop (2003) notes that underrepresented children may internalize negative societal views about their culture or dismiss literacy as irrelevant to their lives, whilst conversely children who frequently see themselves in

books - primarily white, middle-class children from the United States and Europe, can develop a dangerous sense of privilege and superiority based on distorted perceptions of the world. Brooks and McNair (2009) emphasize that books depicting the experiences of children of color do more than showcase a culture; they also challenge negative racial stereotypes in the media and foster conversations about social justice.

However, there has been noted progress documented in recent years, whereby organisations such as The Cooperative Children’s Book Center (CCBC) have published annual statistics of books by and about Black, Indigenous and People of Color (BIPOC) since 1994. They released its 2023 diversity statistics, analysing 3,491 children's and young adult books published that year:

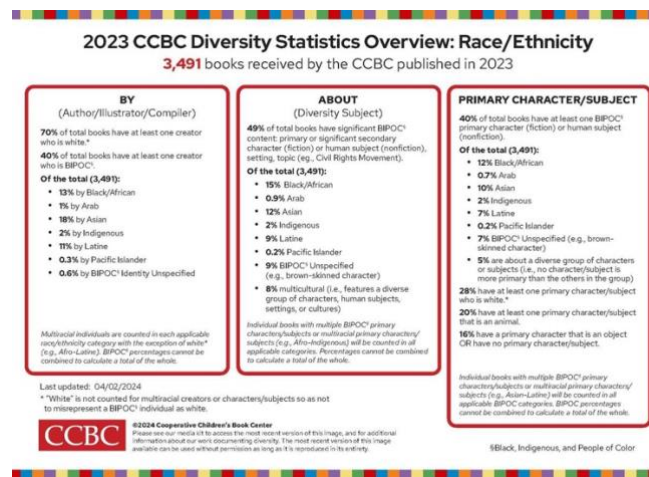


Figure 5. Cooperative Children’s Book Centre. (2024). 2023 CCBC Diversity Statistics Overview: Race/Ethnicity.

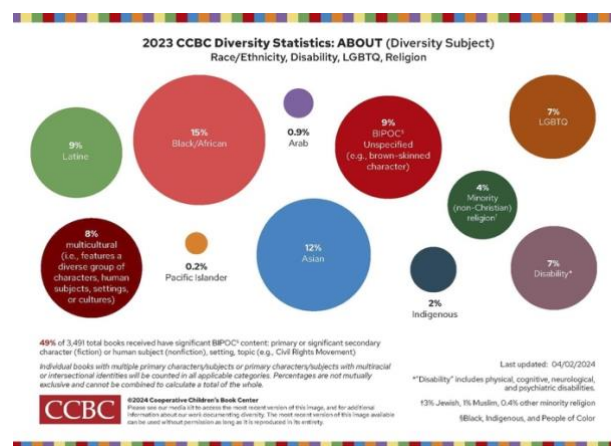


Figure 6. Cooperative Children’s Book Centre. (2024) 2023 CCBC Diversity Statistics: ABOUT (Diversity Subject).

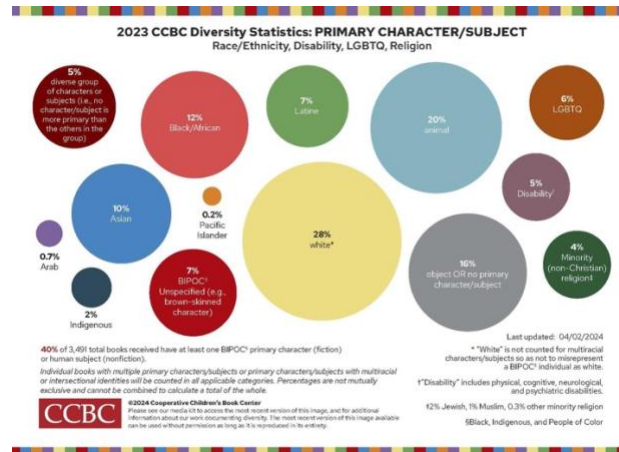


Figure 7. Cooperative Children's Book Centre. (2024). 2023 CCBC Diversity Statistics: PRIMARY CHARACTER/SUBJECT.

Although 49% of the books CCBC documented had noteworthy BIPOC content (up from 46 percent in 2022) and 40 percent had at least one BIPOC primary character (up from 39 percent in 2022), there are still predominantly white primary characters.

Koss (2015) conducted a study using content analysis and lenses of critical race, gender schema, and critical disability theories, to examine the representation of diversity in contemporary picturebooks. The analysis revealed that while there has been some progress in depicting diverse characters, significant underrepresentation persists, whereby characters from minority ethnic backgrounds and non-traditional gender roles are still not proportionally represented in children's picturebooks (p.38). Koss (2015) emphasizes the importance of providing children with literature that reflects a wide range of experiences and identities, as this exposure can foster inclusivity, empathy, and a more accurate understanding of the world.

3.3. Children's literature as a tool for role modelling and social change.

As Adam, Barratt-Pugh, and Haig (2017) explain, "children's literature is important because it nurtures emotional, social, creative and cognitive development, and gives children opportunities to appreciate and respond to diversity. In particular, literature that portrays racial and cultural diversity is a powerful means of promoting understanding of others while affirming individual identity" (p. 88). Concerns about the age-appropriateness of certain content mirror the hesitation adults often feel about discussing sensitive topics with children, such as race, gender diversity, gender identity, immigration, and death, whereby children are frequently perceived as "too young" to grasp these complex subjects (Axelrod, Ives and Weaver, 2020).

Therefore, it can be assumed that children's books are often devoid of ideological and political influences unconcerned with issues like gender, race, and class. But as stated by Sarland (1990), no text, no matter how "simple," can truly be neutral in this sense.

As quoted by Okolie (1998 cited in Muleka, 2001) "In the beginning, there was childhood, and childhood makes the man or woman" (p.13). The implication of this statement could suggest that what a child is exposed to at a young age can be one of the many factors that influence the type of adult they may become in the future. Junaid (2017) explains how books encourage children to engage their imaginations, enrich their vocabularies, and deepen their understanding of themselves and others, and when these books represent the diverse groups that make up the world, they help children develop respect for both themselves and others, serving both as a mirror of a child's own experiences, and a window offering insight into other people's experiences.

'Since children want role models in the books they read, it could be natural that they try to shape their behaviour to conform to the qualities exhibited by their heroes/heroines.' (Muleka, 2001, p.33). Gibson (2004) argues that role models can enhance a child's motivation and show that when children see themselves in their role models, they are more likely to imagine similar paths for their own futures. In an interview, the author of *Little Leaders: Bold Women in Black History* (2019) says: 'A role model doesn't have to be larger than life. As much as the success stories of astronauts and athletes' matter, so do the regular, everyday heroes [...] Representation matters at such a deep level for people of colour because there's been so little diversity and nuance to the images of us in the mainstream' (Harrison, 2019). If children don't feel connected or represented by the main characters in the books they read, they may begin to feel invisible, unimportant or less able than others (Braga, 2022). However, for instance, if a young black girl reads a book about a real life adult black woman from a similar background to her who works in a stereotypical male dominated field, this book is now not only bound by means of escapism and fiction, but becomes a tool to inspire its reader with confidence, pride in their individuality and to dismantle defined social ideologies - as stated by Politis (2022) it has the potential to lay the groundwork for new perspectives on humanity by encouraging young readers to think critically and question established norms.

CHAPTER 4. THE BLACK MAMBAS

4.1. Introducing the Black Mambas: The world's first all-female anti-poaching unit.

The illegal wildlife trade (IWT) involving various species such as rhino horn, elephant ivory, medicinal plants, timber, shark fins, and pangolins, has become a critical global conservation issue, with a significant surge in activity over the past decade (Challender & MacMillan, 2014). It has evolved into a billion-dollar transnational organized crime industry, impacting nearly every country worldwide and intersecting with other heavily organised crimes such as drugs, arms and human trafficking (Wildlife Justice Commission, 2020). The graph below is just one example of the amount of money involved in trafficking an endangered animal from poacher to consumer:

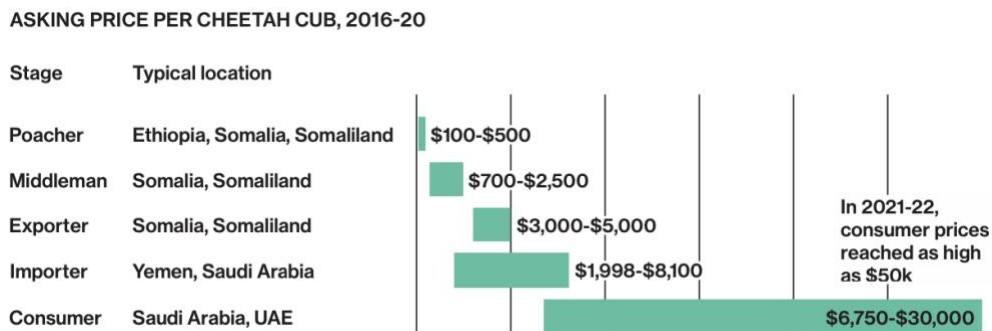


Figure 8. Franklin, J. (2023). A Rhino is worth more dead than alive. Bloomberg.

However, IWT encompasses a broad spectrum of activities. The highly organized, transnational criminal networks engaging in large-scale trafficking of illegally sourced wildlife is only one side of the spectrum. On the other end there is small scale harvesting and hunting of wildlife and plants that is seen amongst local communities as acceptable on the basis of longstanding tradition, customary law, or livelihood need, yet is also labelled ‘poaching’ and can receive similar repercussions to organised crime (Briggs, Cooney, Rose, Dublin, Allan, Challenger, Skinner, 2016).

In cases of high-value IWT (rather than subsistence and/or customary use of wildlife) studies based on direct interviews with both poachers and park rangers indicate that poachers often come from poor communities bordering national parks, and when apprehended they are typically found carrying military-grade weaponry but lack basic supplies such as proper clothing, food, and water (Aucoin and Deetlefs, 2018). The limited job opportunities available in bordering African national park towns have made community members the main target that

international poaching syndicates prey upon - enticing them with a sum of cash in exchange for either information or taking the life-threatening risk of entering a national park or game reserve to track and poach a specific animal (Okes and Sipos, 2022). Not only is being exposed to the natural elements and wild animals a big risk from poaching at night in a game reserve, but the biggest danger comes from the likely head-to-head encounter with an armed and military trained anti-poaching unit. In many cases this escalates into open fire, a bloody conflict that can kill both ranger and poacher (Funk, 2016). There has been a huge increase in the use of military style approaches to anti-poaching units, focusing on heavy weaponry, army-like training and a ‘shoot to kill’ mentality (Duffy, 2014), which comes with significant risks and ethical concerns. The consequence of this dangerous environment results in rangers and poachers entering into conservation areas ready to engage with deadly force, resulting in an inevitable cycle of militarization (Lunstrum, 2014), a risk of compromising human rights and the danger of assumption and pre-emption in the pursuit anti-poaching initiatives (Duffy, 2014).

South Africa’s 20,000-square kilometre Kruger National Park is home to one of the world's largest rhino populations, and with the rhino horn being one of the most valuable illegal trade products, the park has today become one of the vastest war zones worldwide of illegal poaching. This has resulted in Kruger adopting a heavily lethal militarized response, with paramilitary ranger forces patrolling day and night, in the skies and ground, particularly guarding the international borders (see Figure 08) and national fence borders, which has resulted in tensions between the conservation park and the local towns bordering its fences (Lunstrum, 2014).



Figure 9. South Africa’s Kruger National Park.

This has had profound and often detrimental effects on community relations, both within South Africa and across the border in Mozambique, whereby the increasing reliance on armed confrontations has eroded trust between rangers and communities bordering the park's fences, particularly when poachers, who are often local community members, are injured or killed in the name of conservation. As one community member explained in an interview, the escalation of violence has fueled resentment: "You are a killer, you're killing our children out there, you're killing our husbands... you're killing our people out there" (Lunstrum, 2014, p. 823). On the other hand, in 2022 over 100 rangers in Africa were killed - 80% were homicides (Franklin, 2023). This war on conservation damages the very relationships that are crucial for long-term conservation success. When local communities perceive conservationists as threats rather than allies, they become even more alienated to the need for conservation. This dynamic highlights the importance of alternative conservation strategies, which is where the Black Mambas Anti Poaching Unit (APU) took its roots.

Founded in 2013 by Craig Spencer, head warden of Balule Nature Reserve of the Greater Kruger National Park, The Black Mambas APU was created in direct response to counter the military conservation approach, and instead moulded their initiative to prioritise prevention, education, and community engagement (Transfrontier Africa, n.d). Although trained by traditional para-military curriculum, the Black Mambas are far from the average APU.



Figure 10. Gunther J. (2015). Black Mambas take a break.

The first unique strategy that sets this APU apart from others, is that they operate without firearms. The absence of carrying weapons signals a de-escalatory approach, discouraging poachers from responding with lethal force (Lunstrum, 2014). This strategy draws from the

Broken Window Theory, which suggests that visible maintenance of order can prevent more serious crimes (Wilson & Kelling, 1982). The Black Mambas focus on high-visibility patrols, intelligence gathering, and dismantling poaching infrastructure, such as snares and camps, to create an environment where illegal activities become harder to go unnoticed (Hübschle, 2017). Their work sends a deliberate message that poaching is being actively monitored without the hostility and violence that armed enforcement can generate. This approach is one of two pillars working towards strengthening the relationships with local communities, whereby the second pillar is the rangers themselves.

The 36 Black Mambas are all women from local communities bordering the Kruger National Park. Women in many rural African communities are primary caregivers and educators within their households, whilst also having deep-rooted connections to the rest of their community, making them influential figures in shaping the values of younger generations in their surroundings (Cooney et al., 2017). By employing local female rangers, the Black Mambas ensure that conservation aspirations authentically reach families and communities in a way that includes black South Africans, who might otherwise see armed rangers as enforcers rather than allies, fostering collaboration and inclusion rather than resistance and alienation (Franklin, 2023).



Figure 11. Gunther, J. (2017) Grietjie Team, From left to right: Black Mambas Leitah, Lukie (background), Nkateko, Cute and Qolile.



Figure 12. Gunther, J. (2017). Black Mambas at home, Black Mamba's Leitah, Yenzekile, Mirren with her two children, Goodness with Qolile's baby Renold and Qolile walking towards a field to pick up some vegetables.

4.2. The Black Mamba's Bush Baby program.

The Bush Baby Environmental Education Program is a cornerstone of the Black Mambas' broader conservation strategy, reinforcing the unit's commitment to community engagement. While the Black Mambas themselves patrol unarmed and serve as visible role models, the Bush Baby Program extends their influence beyond anti-poaching efforts, actively shaping conservation attitudes among local children and older generations. By fostering environmental stewardship and strengthening social ties, the program addresses one of the root causes of poaching: the disconnect between communities and conservation initiatives (Hübschle & Jooste, 2018).

Created in 2015 by local community member Lewyen Maefala, The Bush Baby Program primarily targets schoolchildren from towns bordering the Greater Kruger National Park, offering them structured environmental education classes that integrate conservation principles with their daily lives. The program has been officially approved by the local Department of Education and is now an integrated part of the school curriculum (Transfrontier Africa, n.d). Five Environmental Educators were selected from the community, trained, and employed in 2019 to assist in expanding and deepening its community outreach. In 2020, the Maseke Tribal Authorities allocated land to develop the Bush Babies Environmental Education Centre, which

now serves as a hub for various projects, including animal welfare initiatives, vegetable gardens, and after-school environmental activities that provide meals and engagement opportunities for children (Transfrontier Africa, n.d). In 2023, the program expanded its reach by implementing the Scout Program, which trains students in basic conservation and leadership skills. This initiative not only enhances students' understanding of environmental issues but also empowers them to take active roles in their communities' conservation efforts (Transfrontier Africa, n.d). Field trips to the national parks provide children with first-hand exposure to the wildlife they are taught to protect, helping to bridge the psychological and physical gap between communities and protected areas, countering the historical exclusion many local communities have experienced (Massé et al., 2018). By enabling direct interaction with conservation professionals who come from similar areas to the children and seeing the wildlife they work to protect, makes conservation a tangible and personal experience for young learners to relate to (Travers et al., 2019).



Figure 13. Gunther, J (2017). Black Mamba Nkateko and Bush Babies education officer Lewyn



Figure 14. Transfrontier Africa (n.d). Creating Champions and Ambassadors in the local Communities

In addition to engaging children, the program also includes elders from the community, referred to as "Bush Grannies." These women play a pivotal role in passing down indigenous knowledge about wildlife and nature to younger generations. Their involvement bridges generational gaps, reinforcing traditional ecological wisdom while aligning it with modern conservation strategies (Lunstrum, 2014). The inclusion of Bush Grannies strengthens the program's ability to integrate conservation into everyday community life, as elders are often respected figures who can influence younger generations (Biggs et al., 2017). Their storytelling sessions and workshops have become integral in educating both the youth and broader community members about sustainable environmental practices (Transfrontier Africa, n.d).

The Bush Baby Program acts as a critical extension of the Black Mambas' mission, ensuring that conservation is not enforced but embraced by local communities. Through education, direct exposure to wildlife, and intergenerational engagement, the program nurtures a culture of environmental responsibility, reinforcing the belief that protecting wildlife is a communal effort rather than an external imposition.

4.3. The Black Mambas as a narrative and creative engine.

The Black Mambas APU have been recognised and featured in various forms of media, ranging from documentaries, news articles, podcasts, magazines, and academic journals. Within the first two years of the unit's creations, the Black Mambas received the Champions of the Earth award, the most notable honour of the United Nations Environmental Program,

recognizing the 75% decrease of poaching activity in the area, which has continued to reduce since (Brown, 2018). These narratives highlight the groundbreaking work as an all-female, unarmed anti-poaching unit, as well as the broader implications of their community driven approach to conservation. The extensive media coverage has played a key role in inspiring the formation of other female-led, community-based anti-poaching units across the world, such as the *Akashinga's* in Zimbabwe (IAPF, 2021), *Team Lioness* in Kenya (UNEP, 2022) and *Lion Queens* in India (Nayar, 2016). However, there remains a noticeable gap in children's literature about local conservation role models from within the communities directly impacted by wildlife crime. Many children's books celebrate conservationists worldwide, from Jane Goodall to Wangari Maathai, introducing young readers to figures who have played key roles in environmental protection, but very few books exist that highlight individuals from local African communities working in conservation - particularly those aimed at children from these same communities. The *Lion Landscapes* book series has seen success in Kenya, Tanzania and Zambia, working closely with community members to produce a children's book with characters the children could identify with and storylines that sparked interest and a passion for conservation (Oxford University, 2023). The positive impact of this series on local communities provides a strong foundation for the development of additional children's books with similar objectives in South Africa.

A children's book about the Black Mambas addresses this by providing young readers with role models who share their cultural background and lived experiences. The Bush Babies Environmental Education Program has already demonstrated how exposure to conservation through locally relatable figures can inspire children (Transfrontier Africa, 2023). By presenting the Black Mambas' story in an engaging and vibrant format, a children's book can foster a sense of ownership and aspiration among young readers, encouraging them to see conservation as a viable and meaningful career path.

CHAPTER 5. THE METHODOLOGY

5.1 Introduction: Outline of the Ethnographic fieldwork.

This methodology chapter outlines the step-by-step process through which visual culture and design were used to respond to the core problem of the project. It details the practical and conceptual decisions made throughout the creation of the children's book, offering

justification for the chosen tools, frameworks, and creative strategies. Although the project was sparked by personal motivation and evolved organically through lived experience and fieldwork, this chapter anchors the process within a rigorous methodological framework. It aims to demonstrate how visual storytelling can function as more than aesthetic expression - serving as a vehicle for fostering a deeper connection to conservation among children from marginalized communities.

The researcher used various methods whilst navigating this project, whereby they spent three months in the Olifants West Nature Reserve, Kruger National Park (South Africa) conducting field work. The following timeline of the research has been briefly laid out in a nutshell so the reader can get a general idea of the book's creation, which will be more thoroughly examined in the following subchapters.

The initial phase of fieldwork involved extensive time at the Black Mambas' headquarters, where the researcher conducted interviews with rangers and accompanied them on snare removal and observatory patrols in the bushveld. Fieldwork then continued in the community town of Meseke, where the Bush Babies Community Centre is based and where most of the Black Mamba rangers reside. Here, the researcher engaged with both educators and children through interviews and informal conversations. The next stage of the book's narrative development was carried out in close collaboration with Lewyn Maefala, the Managing Director of the Bush Babies programme and a respected member of the Meseke community. Together, the researcher and Maefala held a series of narrative development sessions in which they co-constructed the story's core elements: storyline, character development, plot structure, moral message, and tone. Before concluding the fieldwork, the researcher illustrated a draft of the book's cover. This prototype was presented to both members of the Black Mamba unit and the children in the Bush Babies programme for feedback, input and to discuss further ideas or any changes to the design. From there, the book began to take shape. The methodologies used to navigate this project will be discussed in greater depth in the following subchapters, exploring the guiding frameworks of human-centred and environmental-centred design, with qualitative ethnographic research including themes of participatory action, co-creation and reflexivity, a comparative analysis and finally the illustration style.

5.2 A Human & Environmental Centred Research Approach.

Conservation challenges extend beyond the natural environment; they are fundamentally social issues, intertwined with human behaviour, values, and systems. This is why design plays a crucial role in problem solving: individual efforts have limits, but design offers collaborative frameworks and tools that place people at the centre of solution-building (Mwangi, 2022). A research approach commonly used in business and public health sectors will be applied to this project: Human Centred Design (HCD). HCD is among the contemporary design methodologies contributing to a shift within the design discipline - from a traditionally expert-driven model towards one grounded in participation and co-creation with those directly affected by the design outcomes (Lubis and Shahri, 2022). This paradigm shift is reflected in the transition from referring to individuals as “users” to recognizing them as “stakeholders”, a change that acknowledges their deeper involvement in the design process (Krippendorff, 1998), fostering shared ownership of the process and resulting in solutions that are better aligned with the needs and values of the broader community. HCD is grounded in the principle of *empathy*, seeking to develop solutions by understanding and designing from the viewpoint of the individuals it intends to reach, emphasised by gaining insight into what specific people perceive, express, experience, and prioritize (Tsubaki, 2023). Whilst this project requires the need of a HCD approach to ethically and accurately reflect the experiences of the targeted audience, it also takes root in the subject of conservation and endangered species preservation - extending the focus beyond human needs to encompass the well-being of the entire ecosystem, recognizing that humans are an integral part of the natural world rather than separate from it (Sznal, 2020).

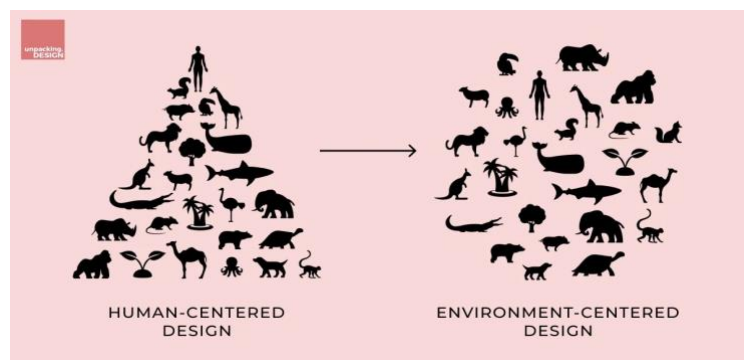


Figure 15. Unknown Author (n.a). Human-Centered Design VS Environment-Centered Design

Environmental Centred Design (ECD) is a relatively new shift in research perspective that recognises the environment and non-human elements as stakeholders that are equal to human factors (Huber, 2021). ECD aims to create products that encompass sustainability in all aspects: environmentally, socially, and economically, with long lasting effects on people and the planet. Its role still gravitates around empathy, understanding and human feedback whilst minimizing environmental destruction and promoting sustainable growth for the planet and social equity (Verma, 2024). In the context of this project, integrating ECD means that the children's book not only reflects the cultural narratives of the community members but also embodies sustainable practices in its content. This holistic approach ensures that the educational tool aligns with the values of conservation, fostering a sense of responsibility and interconnectedness amongst its intended readers.

By combining HCD and ECD methodologies, the project aims to create a narrative that is both culturally resonant and environmentally conscious, promoting a comprehensive understanding of conservation that includes human and ecological perspectives. A research method based on people and the planet involves gaining a deep understanding of the individuals' emotions, behaviours and their environment to design a product that truly connects with them, ensuring it is culturally authentic, engaging, and accessible. This will then require a mixed-method research approach, combining qualitative ethnographic methods with iterative refinement, which we will explore in the below sub-chapters.

5.3. Ethnographic research: co-construction of knowledge through participatory action research.

5.3.1 Ethnographic research. An overview.

Ethnography refers to the systematic study and detailed description of a particular culture or social group, typically presented in the form of a written account or monograph (Hashizume and Kurosu, 2013). Ethnographic research traditionally involves immersive, long-term engagement within a community, where the researcher participates in daily life to observe and document social practices as they naturally occur. This form of inquiry assumes that understanding a culture requires witnessing individuals within their everyday contexts over an extended period, allowing for deeper and more accurate interpretations of behaviour and meaning (Davies, 2008). In the context of Human-Centred Design (HCD), however, ethnography is adapted as a pragmatic tool to gain contextual understanding of peoples lived

experiences within a limited timeframe. While it draws from anthropological methods, ethnographic research in HCD prioritizes actionable insights over comprehensive cultural analysis. As Kimura (cited in Hashizume and Kurosu, 2013) argues, the use of the term "ethnography" in design fields can sometimes create the illusion of a 'magical panacea' (a one-size-fits-all solution) when in reality, its application must be strategic and focused. Ethnographic interviews and contextual inquiry serve as efficient methods for accessing user perspectives by observing their behaviours, routines, and values in real-world settings and engaging in dialogue to understand the motivations behind these actions.

Unlike passive observation alone, this interactive approach emphasizes the co-construction of knowledge between researcher and participant. The goal in HCD is not simply to document what is seen but to interpret it in ways that inform the development of personas, scenarios, and ultimately, design interventions that reflect the values and realities of the intended stakeholders (IDEO, 2015).

As indicated by Kramer and Adams (2017), before commencing fieldwork, ethnographic researchers must make several key decisions regarding the scope and focus of their study. One of the most critical is identifying the specific social or cultural group to be examined. In this study, the decision to focus on the Black Mambas Anti-Poaching Unit and the Bush Babies Environmental Education Program emerged from an intention to explore conservation practice experienced by both women and community members from towns bordering South Africa's Greater Kruger Park. Initially, the focus was solely on the Black Mambas as the primary focus group, an anti-poaching unit composed of women from Meseke - a town located on the cusp of the National Park. However, through early interviews with some of the rangers, it became clear that the Bush Babies program would be a key component for this project. Crucially, this program created a pathway for engaging with the children who are the primary audience of the children's book that emerged from this research. Speaking directly with them through school visits, informal conversations and play, was essential in shaping a culturally resonant and relevant narrative.

The ability to participate in both the daily patrols of the Black Mambas and the educational activities at the Bush Babies Centre in Meseke enabled the researcher to observe and engage with participants across a spectrum of conservation efforts - ranging from frontline protection to community outreach. These natural settings, where activities would have occurred regardless

of the researcher's presence, provided the conditions necessary for immersive and holistic ethnographic observation.

5.3.2. The co-construction of knowledge.

In alignment with a community-based participatory framework, this research is grounded in the understanding that knowledge is not objective or passively observed, but actively co-constructed through social interaction, dialogue, and reflexive engagement (Peralta and Murphy, 2016). As Butcher (2007) highlights, realism and the pursuit of objective facts are insufficient for understanding communities whose knowledge is embedded in context, history, and interpersonal relationships. Instead, drawing on constructivist thought (Guba & Lincoln, 1994), this study embraces the multiplicity of perspectives that emerge from within the community. This approach positions language and dialogue as central tools in the co-construction of knowledge. The lived realities of the Black Mambas and the Bush Babies participants were not observed as detached data but participated as vital stakeholders through ongoing and reciprocal dialogue - where meaning was clarified, challenged, and collaboratively shaped. In particular, the inclusion of children from the Bush Babies program, who are both the intended audience and creative contributors, exemplifies this epistemological stance. Their voices, experiences, and feedback were not merely data points but essential elements in shaping the story's visual narrative.

The children's active involvement in deciding on elements such as the main character's name, appearance, clothing, personality, the animals they would like to see and the games they wanted to play throughout the book...all represents a form of co-construction of knowledge. Rather than simply being consulted, the children became collaborators in the creative process, embedding their imaginations, desires, and cultural experiences directly into the book's world.

5.3.3. Participatory action research.

The co-creation of the books narrative with Lewyn Maefala, a former Black Mamba and head of the Bush Baby program, aligns with Participatory Action Research (PAR) principles which emphasize collaboration, co-learning, and transformation (Peralta and Murphy, 2016). PAR challenges the traditional researcher/subject hierarchy by inviting community members to become co-constructors of knowledge and outcome. Peralta and Murphy (2016) argue that PAR facilitates the democratization of knowledge production, especially when conducted with

historically marginalized communities, as it prioritizes local knowledge systems and cultural specificity over externally imposed frameworks. Rather than treating the children's book as a unilateral expression of conservation ideals, the project becomes a living document of shared values, shaped through collective meaning-making, situated knowledge, and mutual creativity. This approach reflects what Cornwall and Jewkes (1995) describe as "research with people" rather than "research on people" - an essential distinction when working in conservation spaces that have long histories of community exclusion and top-down decision-making. By placing both co-participation and reflexivity at the heart of the methodological design, this thesis actively seeks to dismantle those historic divides, reinforcing the project's broader aim to bridge Western conservation paradigms with local ecological knowledge and lived experience.

5.4. The importance of reflexivity.

'Often, however, the histories of marginalized communities are written from a privileged perspective, and members are told what matters about their past' (Spring, 2013). Ethnographic research is inherently immersive and interpersonal, requiring the researcher to engage deeply with the cultural and social contexts of the participants. Reflexivity and participatory co-construction are therefore two key principles that ground this approach, especially vital in postcolonial community centred projects such as this one. Reflexivity is the ongoing process through which researchers critically examine their own positionality, values, and impact on the research context - so rather than striving for objectivity, reflexive ethnographers acknowledge their subjectivity as an integral part of the research process (Davies, 2008). This includes reflecting on how the researcher's identity, whether in terms of race, gender, class, or cultural background, may shape interactions in the field and the interpretation of data (England, 1994). Davies (2008) explains that ethnographic researchers must continuously consider their positionality - not just in relation to their participants, but also in how their methods, interpretations and goals are informed by their personal histories, power dynamics, and cultural norms.

In this instance, this project's researcher is a white European woman conducting the role of an external observer and co-collaborator within a South African community, which therefore required sustained acute reflexive attention. As England (1994) notes, even seemingly neutral research practices are embedded in power relations that can unintentionally reproduce hierarchies if left unexamined. By recognizing the influence of one's cultural background, social

position, and intentions within the research space, reflexivity serves as both an ethical safeguard and a tool for more honest, transparent knowledge production. It encourages the researcher to not only be aware of their influence, but to actively adjust their approach in ways that centre the perspectives and agency of participants. Reflexivity, when combined with participatory action and co-construction, can provide the research with tools to remain responsive, ethical, and relevant. As Kindon, Pain, and Kesby (2007) point out, participatory work is inherently relational, and reflexivity becomes a way to manage and honour those relationships.

5.5. A comparative analysis.

Before the book developed, a comparative analysis of existing children's literature was conducted. The goal of this analysis was to examine the landscape of children's books with environmental themes, identifying potential gaps and how to ensure this project could fill them.

The first step in the comparative analysis involved selecting twenty children's books, chosen from critically acclaimed titles identified by internationally recognized literary organizations with themes of conservation and environmental education. Through comparative analysis, books most frequently cited across these platforms were selected for further examination.

These books were then examined using a set of criteria aimed at uncovering patterns in how conservation issues were framed, particularly in terms of cultural representation and the inclusion of diverse protagonists. One major aspect of the analysis focused on representation informed by the literature review, which discussed the historical underrepresentation of racial and gender diversity in children's media, especially in environmental contexts. Specific attention was given to whether stories included Indigenous conservationists, as well as the presence of female protagonists and real-life female environmental role models, with an emphasis on African community members. In addition, the books were assessed for their language complexity to understand how accessible they were for early readers or those for whom English is not a first language. The presence or absence of interactive learning features - such as activities or engagement, was also considered to evaluate how effectively these texts support participatory environmental education. The Literature Review emphasized the need for children's literature to not only inform but also empower young readers. As such, the comparative analysis sought to determine how the texts encouraged environmental stewardship and fostered a sense of agency among children, inspiring them through relatable role models.

Through this comparative analysis, the project was able to position itself critically within the field of Design and Visual Culture through children's environmental literature.



Figure 16. Comparative analysis of selected children's books. By the Author. 2025

5.6. Illustration style and development: Visual storytelling as a bridge

The visual design process for this project was rooted in the desire to make complex themes of environmental conservation, marginalized community involvement, and the empowerment of women in conservation fields, accessible to young readers. As examined above, this was partly navigated through the co-creation and participatory action of the Bush Baby children and Black Mamba rangers, but also from the researcher's own artistic influence as an illustrator. While the fieldwork stakeholders provided invaluable input regarding the story's content and narrative, the final style of illustration was heavily influenced by the researcher's background in animation and visual storytelling. The style was inspired by animated series such as *The Wild Thornberries* (1998), which combines themes of adventure with environmental education. This was important as it allowed for a playful, yet informative approach to visual storytelling. Drawing from animation artists such as Steve Pepoon, David Silverman, and Stephen Sustarsic, the illustrations adopted a bold, expressive style that emphasized exaggerated features, bright colours, and fluid motion. These design choices were not only aesthetically appealing but also aimed at making the themes of conservation feel

dynamic and engaging for children. The visuals were intentionally designed to soften the weight of the book's themes by using vibrant colours and cartoonish character designs that would captivate a young audience. This approach was designed to break down potentially complex issues (such as poaching) into easily understood visual cues, making the content accessible without diminishing the importance of the messages being communicated.

Additionally, the process involved incorporating interactive elements suggested by the Bush Babies children. For instance, the children were highly enthusiastic about the idea of games such as 'spot the animal' or 'follow the map', as well as quizzes and fun facts that could help reinforce conservation themes in a playful and engaging way. It was essential that these interactive elements followed key moments in the story, to be incorporated into the design to actively involve readers and encourage learning through play. This approach aimed to make the educational content less didactic and more integrated into the reader's experience of the book. By grounding the design process in both community collaboration and personal artistic influence, the project aimed to create a visually dynamic book that is both educational and a fun journey for the reader of various ages and reading levels.

CHAPTER 6. COMPARATIVE ANALYSIS: RESEARCH RESULTS

6.1. Mapping the field: A review of existing environmental children's literature.

To understand the current landscape of environmental storytelling in children's literature and to assess how representation and role modelling are handled across existing titles, a comparative content analysis of a selection of twenty children's books was conducted. This selection was based on a cross-examination of curated lists of children's books addressing environmental themes from internationally recognized literary organizations. Titles that appeared most frequently across these sources were selected. Each book was then evaluated according to a set of criteria directly aligned with the goals of this thesis: the presence of marginalised cultural representation, female protagonists (fictional or non-fictional), real life female role models, and the use of interactive learning features. These criteria reflect this project's core focus on addressing gender and racial underrepresentation in conservation narratives, and how children's literature can serve as both an educational and aspirational tool. In addition to representational criteria, each book's complexity was assessed in terms of accessibility for children whose first language may not be English and whose exposure to

formal education may differ from Global North standards. Books were classified as low, medium, or high complexity based on sentence structure, vocabulary, conceptual density, and narrative style. This allowed for a more equitable comparison, ensuring that the storytelling format is as inclusive as the content it conveys.

Overall, this comparative analysis seeks to map what is currently available, what is missing and to therefore evaluate how this project could meaningfully address those gaps.

| Book & Author | Theme | Representation of Indigenous conservationists or local culture | Female Protagonist (fictional/non-fictional) | Female role models (non-fictional) | Complexity | Interactive learning | Source |
|---|--|---|--|---|---|--|---|
| <i>The Lorax</i> by Dr. Seuss | Deforestation, exploitation | Fictional setting | | | High - Rhyming, allegorical language; abstract themes may be difficult to grasp without explanation. | | https://www.goodreads.com/book/show/7784.The_Lorax |
| <i>We Are Water Protectors</i> by Carole Lindstrom | Water protest, anti-corruption, community led movement | Indigenous resistance | | Inspired by real events | Medium - Poetic but repetitive; visual storytelling helps support comprehension. | Activity kit | https://carolelindstrom.com/books/we-are-water-protectors/ |
| <i>The Water Princess</i> by Susan Verde | Water scarcity, clean drinking water awareness | Georgie Badiel, her community & culture | | Based on Georgie Badiel's life + other female characters | Medium - Biographical with some descriptive passages, generally accessible | Book extension activities | https://afrorbooks.co.uk/products/the-water-princess-by-susan-verde-and-georgie-badiel?srsltid=AfmBOopP4t4RYDeCwaSpLy77uwl_SgyGkapnc2GPWmkF13nOCOA_urdT |
| <i>Greta and the Giants: Inspired by Greta Thunberg's Stand to Save the World</i> by Zoë Tucker | Climate change, activism | | | Greta Thunberg | Low/Medium - Fictional narrative with simple phrasing; metaphors but overwhelming. | | https://www.booktrust.org.uk/book-recommendations/bookfinder/greta-and-the-giants/ |
| <i>Somebody Swallowed Stanley</i> by Sarah Roberts & Hannah Peck | Ocean plastic pollution | Fictional characters | Plastic bag protagonist | | Low - Straightforward narrative with rhyming and repetition. Very accessible. | | https://www.sarahrobertsofficial.com/somebody-swallowed-stanley |
| <i>The Rainforest Book</i> by Charlotte Milner | Deforestation, biodiversity | General approach, animal characters | | | Low/Medium - Informational and visually engaging | | https://www.goodreads.com/book/show/53398937-the-rainforest-book |
| <i>Heroes of the Environment</i> by Harriet Rohmer et al. | Environmental activism, changemakers | Diverse voices from different cultures and marginalised communities | Several featured | | High - Multiple biographies written for older children, with factual structure and occasional technical language. guided reading. | | https://www.bookee.app/book/heroes-of-the-environment |
| <i>Where the Forest Meets the Sea</i> by Jeannie Baker | Rainforest preservation | references but no major part to play | | | High - Strong visual narrative, but poetic text with implied messages and symbolism may not be clear without support | | https://www.jeanniebaker.com/book/where-the-forest-meets-the-sea/ |
| <i>A Boy and a Jaguar</i> by Alan Rabinowitz | Wildlife, conservation, stuttering | | | | Medium - Language is clear, but the themes of identity and stuttering need discussion | | https://www.ourhenhouse.org/book-review-a-boy-and-a-jaguar-by-alan-rabinowitz-illustrated-by-catia-chien/ |
| <i>Lost and Found</i> by Oliver Jeffers | Friendship, exploration | | | | Low - Minimal text and very simple vocabulary. Accessible to early readers or children learning english | | https://oliverjeffers.com/books/lost-and-found |
| <i>The Watcher: Jane Goodall's Life with the Chimps</i> by Jeanette Winter | Wildlife observation, conservation | | | | Low - simple sentences and supportive visuals | | https://www.ala.org/winner/watcher-jane-goodalls-life-chimps |
| <i>Forest fighter : the story of Chico Mendes</i> by Anita Ganeri & Margaux Carpentier | Rainforest activism | | | | High - political and social context, guided or translated reading. | | https://www.sonderbooks.com/Childrens_Nonfiction/forest_fighter.html |
| <i>The Boy Who Harnessed the Wind</i> by William Kamkwamba and Bryan Mealer | Innovation, sustainability, community action | | | | High - context-rich, complex vocabulary and concepts that may be challenging without translation. | | https://goodandbeautifulbooklist.com/book/the-boy-who-harnessed-the-wind-picture-book-version/ |
| <i>One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia</i> by Miranda Paul | Plastic waste, recycling, community empowerment | | | True story of Isatou Ceesay | Medium - Biographical story, accessible tone and illustrative storytelling | online community with events, activities, interactions | https://oneplasticbag.com/ |
| <i>What a Waste: Trash, Recycling, and Protecting our Planet</i> by Jess French | Waste pollution, environmental education | | | | High - Non-fiction, fact-heavy, global stats; less accessible for early readers or non-english speakers. | fun facts, follow the road games | https://www.goodreads.com/book/show/41800246-what-a-waste |
| <i>Not for Me Please: I Choose to Act Green</i> by Maria Godsey | Eco-responsibility, recycling education | | | | Low - accessible language supported by descriptive illustrations | | https://beatkidsbooks.com/selection/not-for-me-please-i-choose-to-act-green/ |
| <i>Planting Peace The Story of Wangari Maathai</i> by Gwendolyn Hooks | women's rights activist, environmental warrior | Story of Wangari Maathai | | Wangari began the Green Belt Movement in Kenya in the 1960s | Medium - Factual but simply written. Relatable story, | | https://www.hachettekschools.co.uk/book/planting-peace/ |
| <i>The Michael Recycle series</i> by Ellie Bethel | Recycling, eco-action, environmental education | | | | Low - Simple rhyming text, comic format, for early learning language | 'go green tips' for kids | https://www.lovereading4kids.co.uk/series/Michael-Recycle |

Table 1. Comparative analysis of selected children's books addressing environmental themes. By the Author. 2025.

6.2. Key findings from the research.

6.2.1. Underrepresentation of community led environmental action.

Most of the children's environmental books focus on Western conservationists, abstract characters, or anthropomorphized animals. While these narratives often aim to raise awareness, they rarely highlight the work of grassroots conservationists - particularly communities of African environmental work.

Gap Identified: Children, especially those from marginalised backgrounds, are not given opportunities to see conservationists who reflect their own cultural or social realities. There is a need for literature that introduces young readers to real-world changemakers from communities, figures whose stories challenge colonial conservation narratives and affirm the value of local knowledge, lived experience, and environmental stewardship rooted in place and identity.

6.2.2. Underrepresentation of Women environmentalists.

Although several books in the analysis feature female protagonists - such as *Greta and the Giants*, *The Water Princess*, and *We Are Water Protectors*, only a small number portray women as real-life environmental changemakers. Many female-led stories are fictionalized, symbolic, or disconnected from actual conservation work. Others feature girl characters without positioning them as empowered role models with agency. Furthermore, most real-world environmental biographies in children's literature still centre male figures or Western women, leaving women conservationists of colour underrepresented.

Gap Identified: While female leads do exist, few books present authentic, action-driven portrayals of women working in environmental fields, particularly from rural communities. This limits the availability of community-based role models for girls, who may not see themselves reflected in conservation narratives.

6.2.3. Language complexity.

A significant number of the books rely on dense text, abstract language, or culturally specific references that make them less accessible to children for whom English is not a first language. Books like *What a Waste*, *The Boy Who Harnessed the Wind*, and *Heroes of the*

Environment contain valuable content, but their advanced vocabulary, non-linear structures, or factual density require guided reading or translation to be understood fully in multilingual or under-resourced educational settings. Well-illustrated books such as *Where the Forest Meets the Sea* use symbolic or poetic language that may be difficult for younger readers or those unfamiliar with Western narrative conventions. In contrast, books such as *Lost and Found* and *Somebody Swallowed Stanley* use clear, simple text and literal storytelling, making them more universally accessible across contexts.

Gap Identified: Many books use technical wording or heavy paragraphs, making them difficult for early readers to engage with. For children living in rural areas who may or may not go to school, these stories could become inaccessible without significant support. A need for clear, direct language paired with rich and familiar visuals, ensuring that the story is engaging and understandable for children of all backgrounds.

6.2.4. Limited use of interactive learning features.

While several books incorporate interactive elements such as activity kits (*We Are Water Protectors*), online activities (*One Plastic Bag*), or eco tips (*Michael Recycle*), many lack engaging, hands-on components that actively involve young readers in environmental learning. Less interactive and experiential learning tools can reduce opportunities for children to deepen their connection with environmental themes through action and participation.

Gap Identified: This limits engagement, especially for diverse learners who benefit from multi-sensory or activity-based experiences. Enhancing interactive features - such as games, creative prompts, or localized environmental projects, can support more effective and long-lasting environmental education. There is a need to weave culturally relevant, interactive learning aligned with the lived experiences of its audience, fostering active environmental inclusivity from an early age.

6.3. Summary of findings.

The comparative analysis of contemporary children's environmental literature reveals gaps in representation, accessibility, and engagement. While the books surveyed a broad range of environmental themes, most rely heavily on Western figures, fictional narratives, or anthropomorphized animals. Community based conservationists are largely absent, leaving

many children without access to diverse role models who reflect their cultural heritage. And although female protagonists are present in some titles, few depict real-life women leading environmental change. When women do appear, they are often symbolic or background figures, and African female environmentalists remain especially underrepresented.

Language complexity also emerged as a barrier, with many texts containing abstract language, dense vocabulary, or Western-centric metaphors that make them inaccessible to children for whom English is not their mother tongue. Books with simpler vocabulary and descriptive visual storytelling were found to be more inclusive, particularly in multilingual or under-resourced educational settings. Additionally, while a few titles incorporate interactive elements like activity kits or online engagement, the majority lack hands-on, experiential learning features that could deepen a child's understanding and emotional connection to environmental topics.

These findings highlight a need for children's literature that centres real-world, community-based environmentalists, using clear, accessible language with visually rich storytelling and interactive features that support diverse learning. However, addressing these gaps meaningfully requires more than literary analysis. The following chapter explores how ethnographic fieldwork, interviews, and collaborative engagement with environmental specialists and educators informed the creation of a children's book that is not only inclusive in content and form but grounded in the lived experiences and knowledge systems of those working on the frontlines of community led environmental action.

CHAPTER 7. THE FIELD WORK: INTERVIEWS, COMMUNITY OUTREACH, OBSERVATIONS AND KEY RESULTS

7.1. The Black Mamba interviews.

7.1.1. The interview process.

During February 2025, the author conducted a series of immersive interviews with members of the Black Mambas in the Balule Nature Reserve, immersed in the Greater Kruger National Park. These interviews formed a cornerstone of the field research, offering deep insight into the lived experiences, motivations, and perspectives of the Black Mambas. Beyond formal sit-down conversations, the interviews also took place during patrols and within spaces central to the Mambas' daily routines, enabling a more fluid, grounded, and relational

ethnographic approach. The selection of participants was on a volunteer basis, ensuring that each ranger interviewed was there on their own accord and allowed a diverse mix of voices across age, experience, and background. Consent was obtained verbally, and participants were offered anonymity, though all who appear in the analysis below gave explicit permission to be named. All interviews were conducted in a semi-structured format, blending prepared questions with organic conversation and when needed, translation was provided. Although most of the interviews were more conversation led, the author guided the space to explore multiple key areas: the motivations and challenges of becoming a Black Mamba, experiences of gender dynamics in the conservation space, the role of community perception and response to their work, reflections on their portrayal in the media, educational materials, and their input on the children's book project.

Three key interviews shaped this part of the research:

15/02/25 – Snare Sweep Patrol with Nkateko Letti, Lucendar, and Belinda:

This interview unfolded during a morning snare sweep walk of 3 hours - a patrol method where the Mambas scan the bush for signs of poaching activity and remove wire snares (over 1,470 collected in the past six years). Paused on a fallen tree in the bush, they spoke openly and enthusiastically about their paths to conservation, the symbolism of unarmed patrols, and their deep commitment to environmental education and gender empowerment.



Figure 17. Photo of Nkateko Letti, Lucendar, and Belinda. Image by the Author. 2025

20/02/25 – Fence Line Patrol with Colett and Lerato:

Conducted while walking along the fence separating the reserve from the busy R40 highway, this daily patrol has a dual purpose: monitoring for poaching access points and serving as visible, peaceful deterrence. The interview here illuminated how visibility - especially as unarmed, uniformed women, has become a strategic conservation tool. The conversation focused on role modelling, cultural perceptions of wildlife, and the transformative impact of the Bush Baby program on children from their town.



Figure 18. Photo of Colett and Lerato. Image by the Author. 2025

21/02/25 – Interview at Black Mamba Headquarters with Supervisor Leitah Mkhabela:

Conducted in the operations office, this conversation offered a rare glimpse into the coordination, leadership, and emotional labour behind the scenes. Pregnant with her first child, Leitah spoke with deep conviction about how her journey began with an environmental education program in high school. She reflected on her supervisory responsibilities, her love for time in the bush, and her belief in the power of the Bush Baby program.

7.1.2. Key themes and findings

The interviews revealed several key themes that align with the broader objectives of this research, particularly concerning the intersections of conservation, gender, education, and representation. Through a thematic analysis of field interviews, five core themes emerged:

Childhood exposure to conservation:

A recurring thread across the interviews was the significance of early exposure to conservation education in shaping career aspirations. Many of the Black Mambas described early experiences with environmental education programs - initiatives like the Bush Baby Program, as pivotal moments serving as gateways into a world that had previously seemed inaccessible, despite living so close to these protected areas. Leitah spoke of joining an outreach program at school that allowed her to learn about conservation and visit the reserves:

“That's where we first saw wild animals for the first time. From there I fell in love. [...] We saw a rhino, and they told us their story. In my mind I thought the poachers were not shooting to kill, I thought they make the rhino sleep and then cut the horn and then it will grow again. So I only find out that when I'm in the reserve they shoot to kill, I couldn't believe it. But I met rangers there that inspired me. So that's where it started.”

Similarly, Colett traced her path directly to a high school outreach program:

“There was this belief that wild animals belong to white people because of the fence. But there was a program in my high school like the Bush Babiy program, from grade 9 to grade 10. This program used to visit us at school, teach us about the environment, and nature itself. Education opened our eyes to all the opportunities in conservation.”

A very real alienation from wildlife at a young age was mentioned repeatedly, reflecting the separation between community and a post-colonial conservation mentality. These accounts portray how early and personal educational experiences with wildlife can seed inclusive conservation values - especially when role models and opportunities are visible.

Dismantling gendered norms:

Another prominent theme is the Mambas' conscious challenge to gender norms within conservation. As women in a male dominated workforce, they position themselves not only as ranger conservationists but as very visible challengers to a patriarchal environment. They articulated a clear desire to protest gendered expectations, not as an incidental outcome of their work but as an explicit motivation and source of pride. Nkateko expressed this with clarity:

“I wanted to prove to the world that even ladies like me can work in the bush under big five animals without guns.”

Colett added:

“We change the mindset that only men can do the ranger thing. Women can even do it better.”

Not only do they perform the duties of a ranger, but they also carry the symbolic weight of representation. This visibility extends beyond their immediate sphere. Belinda shared that her daughter, inspired by her work, now aspires to be a field guide:

“Now she says, ‘Mom, one day I want to be a field guide.’”

This highlights the generational impact of representation and suggests that visibility in conservation may help shift occupational norms over time. Children who viewed conservation as a male or external domain are now seeing women from their own communities in leadership roles. Several Mambas described how young girls in their villages identify with them, aspire to join the unit, or speak about animals with pride and protection. The role modelling is intensified by its proximity: these are not distant celebrities or textbook figures, but aunts, mothers and neighbours.

Unarmed surveillance:

A defining feature of the Black Mambas is their unarmed approach to anti-poaching patrols. This was not framed as a limitation but as a deliberate ethical and community-oriented decision. The Mambas view their unarmed status as a strategy of deterrence rooted in trust, visibility, and relationality. Belinda explained:

“So many people don’t understand why we’ve been in the bush for so many years without guns, they don’t know the reason. The reason is this: we don’t want to live in a village or community where people have lost their families because of us. If I can come here using guns shooting poachers and killing them then when I go home the community will definitely want to seek revenge because I killed their families. So we use five weapons instead: spotlights, radios, phones, education, and access.”

Nkateko echoed this emphasis on peaceful surveillance:

“We are the eyes and the ears of the bush.”

This practice challenges militarised models of conservation that frame anti-poaching in combative terms (Duffy, 2020). The Mambas’ presence along the R40 highway and in local communities act as both a visual deterrent and a symbolic gesture, communicating vigilance,

solidarity, and care - without invoking fear. Resisting the pressure to perform military style enforcement, the Mambas reframe conservation as something that can be both peaceful and effective. Belinda reflected on the cultural power of this posture:

“The poachers know we don’t carry guns. Even if they see us, they know we’re not here to kill them. We’re here to protect.”

This philosophy gestures toward a care-based ethic of conservation, one that emphasizes co-existence between ranger and community member.

- The role of community education in conservation

Community education emerged in all interviews as a cornerstone of the Black Mambas’ conservation philosophy. Rather than viewing their role as limited to the protection of wildlife, the Mambas consistently emphasised the importance of community engagement, environmental education, and the transformation of social attitudes - particularly among children. Their approach positions education not as a peripheral activity, but as a primary and strategic form of conservation intervention. Community-led outreach programs, such as the Bush Baby and Bush Grannies program that directly impact children and elders in local communities, are seen as essential to long-term conservation success. Nkateko explained:

“Education is the key, we are able to change their mindset and educate them about conservation and nature itself. Open their eyes to all the opportunities in conservation, so many opportunities. For example you can be a doctor in conservation! You can be a teacher in conservation, you can be an environmental educator facilitator, you can be a police in conservation because you can be a ranger. And then again you can be a leader in conservation because you can be a guide.”

The importance of first-hand experience was especially powerful in the reflections of supervisor Leitah:

“There’s a lot of roles that are being played there, there’s a lot of emotions when you’re at the centre, meeting these kids and getting to know where they come from and their background, how they live at home and how they want to live in the bush when they visit the bush baby centre here in the reserve. So many of them have never been out there in the bush. The same way I grew up. But now they have a chance to come here, and to see

their eyes go 'oh its a dream come true' immediately we have changed the life of that kids, you can see and tell how they look at the animal, the way they bond with them, they tell their friends, the stories that they"

The Mambas also described community education as a form of social care and emotional labour. Leilah explained that many children attending the Bush Baby centre come from households facing food insecurity:

"Some kids, if they don't get food from the centre, they don't eat the whole day."

This insight situates the Bush Baby project not only within environmental education, but within a broader ethic of care (Tronto, 1993). The Mambas' role extends beyond the technical domain of anti-poaching patrols: they act as mentors, caregivers, and community figures, addressing multiple dimensions of well-being. From a theoretical standpoint, this aligns with recent calls for "convivial conservation" (Büscher & Fletcher, 2020), a model that integrates social justice, education, and human well-being into environmental strategies. Their educational work is not extractive or hierarchical, whereby multiple interviewees described the relationship with the children as reciprocal. Leilah remarked:

"They ask so many questions... I think they've gained more knowledge than us! We learn a lot from them."

This speaks of a participatory model of learning, one that celebrates children's curiosity and capabilities rather than positioning them solely as passive recipients of knowledge.

Cultural identity:

A central discussion point in the interviews was the children's book project, which prompted enthusiastic reflections from the Mambas. The interviews highlighted the profound significance of storytelling in conservation - not only as a means of education but as a tool of identity and belonging, a cultural and generational bridge between people and people, and people and wildlife. Leilah stressed the importance of recognition and representation:

"It is important that looking at the images of this book you'll be able to tell who these women are and where they come from, and it's very important they see their mum, aunt, neighbour, sister in these characters. This will make young children believe they can do this too."

This quote speaks directly to the core principles of representation, that children's literature should reflect the communities it hopes to reach, not only for inclusivity but to generate imaginative possibilities. Leitah's comment resonates how Bishop (1990) describes storytelling as a mirror (what children see of themselves) and a window (what they see of the world). Colett echoed this emphasis on early access to knowledge and representation:

"I think it's important to have a book like this at an early age, growing up with it. Like ourselves it started in grade ten which is already half a university, so you don't grow up with that information but now starting at a younger age it's good because these children will grow up with this information at an early age."

This insight highlights a structural gap in conservation education, that by the time environmental knowledge or career pathways are introduced in formal schooling, many young people have already internalised exclusion. Moreover, the value of storytelling extends beyond the children themselves, as Colett explained:

"This book, they can share the information they learnt and show and educate their parents and grandparents. It will definitely be so useful and a fun way to educate them and also they can identify with the character, which you don't see in a lot of children's books here."

Children's literature is not only a pedagogical tool but can also be used as a catalyst for community dialogue, offering children a way to pass on conservation values in home settings, educating family members that may have very different ideas and concepts of conservation.

7.1.3. Patrol Observations

Field-based observation formed an essential component of this research, offering further insight into the Black Mambas' conservation work. These observations complemented the interviews and illuminated dimensions of ranger work that are difficult to capture through verbal reflection alone, such as gesture, environmental awareness, sounds, smells, and the labour involved in being a monitoring ranger. The rangers' unarmed status was evident not only in their equipment, or lack thereof, but in their conduct. Their tools consisted of radios, phones, and notebooks, supported by a central communications hub where sightings and reports could be logged digitally. The absence of weapons was not experienced as a limitation by the rangers

but articulated as a deliberate choice, maintaining a relational form of deterrence based on trust, familiarity, and non-escalation.



Figure 19. Photos of Lucender on patrol. Images by the Author. 2025

The physical labour of walking for hours across varied terrain was executed with minimal verbal communication, relying instead on attentiveness to environmental cues, gestures, and a tacit understanding between team members. Patrols were methodical and purposeful, involving continuous scanning of the ground, vegetation, and animal behaviour. In the case of snare sweeps, rangers demonstrated an ability to identify subtle signs of disturbance, such as unnatural bends in branches or faint tracks in the soil. Colett shared that sweeping was her favourite part of the work because of the information she could gather - from tracking footprints to reading bird calls. This affective connection to the land was also present in story fragments shared during patrol, such as a giraffe once “saving” Nkateko’s life during patrol by alerting her to a nearby lion, or Lucendar sharing her initial fear of elephants, which after learning their behaviour and spending much time with them has become her favourite animal.



Figure 20. Photo of Colett and Lerato on fence patrol. Image by Author. 2025

An interesting moment that emphasized the importance of reflexivity in field research arose during the fence patrol. The author noticed the frequency of vehicle horns erupting from the highway whilst patrolling the fence, an intense performance specifically towards the Black Mambas. Initially interpreted by the researcher through a gendered lens as potential ‘catcalling’, this behaviour was later clarified by the rangers as acts of recognition and solidarity. According to them, many of the drivers either knew them personally or were familiar with the Black Mambas' work. Far from being objectifying, the honks were experienced by the rangers as affirmations of support, reinforcing their visibility and strengthening their relationship with the surrounding community.

The ability to walk amongst the Black Mambas was also a crucial part of this project in terms of the creative lens for the book's aesthetic, allowing the author to sketch and photograph essential elements of the surrounding bush as well as the rangers movement in its environment, which will be further discussed in following chapters on the book's creative development (see p.69).



Figure 21. Photo of Nkateko Letti, Lucendar, and Belinda. Image by the Author. 2025

7.2. Community outreach

7.2.1 Maseke town and the Bush Baby Centre

Maseke is a rural community located on the edge of several private game reserves and directly bordering the Greater Kruger National Park. As part of the wider Ba-Phalaborwa region, Maseke sits within a landscape that is not only ecologically significant, but also politically complex, comprising tribal land under the authority of traditional tribal leaders, including the Ba-Phalaborwa Traditional Authority, Maseke Traditional Authority, Selwane Traditional Authority, and Majeje Traditional Authority (Ba-Phalaborwa Municipality, 2025). These governance structures coexist with formal conservation boundaries, creating an intersection of cultural, environmental, and legal frameworks.

Communities like Maseke have historically been excluded from conservation decision-making, despite living directly adjacent to protected areas. This proximity also places them at the frontline of broader conservation challenges, including human-wildlife conflict, economic marginalisation, and the pressure from poaching syndicates. As examined in previous chapters, such criminal networks often prey on under-resourced communities, exploiting poverty and unemployment to recruit individuals into illegal wildlife trafficking (see p.14). In this context, the presence of grassroots, youth-focused environmental education programme is substantial and far-reaching.

In 2020, the Maseke Traditional Authority granted land to the Bush Babies Environmental Education Programme to construct a permanent Environmental Education Centre in the town (Transfrontier Africa, nd). This centre has since become a hub for conservation awareness, youth development, and community building. It hosts a wide range of activities including a Scouts programme, Animal Welfare workshops, the cultivation of a vegetable garden, and feeding children who participate in the after-school sessions.

The authors' fieldwork included three visits to the Bush Baby Centre, where they were able to observe and participate in activities and engage directly with the children and staff. The centre welcomes children from as young as three years old to late teenagers, all of whom voluntarily attend the programme after school. These visits offered a deep understanding of how conservation education is experienced on the ground, not as an abstract concept, but as an integrated part of everyday life. The centre operates as more than just an educational space - it is a safe and nurturing environment, deeply embedded within the community, and led by trusted figures such as Lewyn Maefala, a former Black Mamba and current project coordinator. A community targeted for poaching recruitment, the Bush Baby Centre offers a powerful counter-narrative.

7.2.2 Key Findings

The visits to the Bush Baby Centre revealed several key insights that were crucial not only to understanding the social and educational dynamics of the programme but also to shaping the children's book. While much of the existing environmental children's literature is directed at Western audiences, this project sought to centre the experiences of children in Maseke by creating a story rooted in their environment, culture, and everyday realities - one where they could see themselves reflected in the characters and recognise the world around them in the illustrations. This is precisely why spending time in the community was crucial: to meet the children firsthand, understand their perspectives, and ensure they had every opportunity to actively shape the book's content, characters, and visual design.

One observation of the centre itself was the absence of children's books or any form of a library. This lack of material resources highlighted the need for relevant and accessible reading material that can both educate and entertain. In this context, the children's book project took on added agency - not simply as a creative output, but as a real educational tool. Despite the limited

resources, the centre itself was vibrant and alive with activity. A garden built and grown by the children and educators formed part of the learning environment. The produce grown is shared with families in the community, reflecting how the centre is directly connected and weaved into community engagement.



Figure 22. Community garden at Bush Baby Centre. Image by the Author. 2025

Throughout the visits, a strong emotional bond between the children and the eco-educators was clear. The educators were a mix of local volunteers and current Black Mambas, with Lewyn Maefala serving as both the facility manager and lead teacher. The author's initial interactions with the children were marked by shyness and hesitation, however this gradually shifted through play, where activities and drawing sessions created opportunities for ease, connection and curiosity. These informal, participatory moments proved invaluable for inviting the children into the creative process. During these sessions, the children were asked questions about the book's content: what animals they wanted to see, what names they liked, what clothes characters should wear, what personalities they should have. These informal interviews served as a form of co-creation, allowing the children to shape the book's narrative, characters, and aesthetic in meaningful ways.



Figure 23. The author and scouts at the Bush Baby Centre. Images by the Author. 2025

The children's interest in animals was evident, often paired with an awareness of the poaching crisis and its consequences. One particularly revealing moment emerged during a conversation with an eight-year-old girl, whilst talking about pangolins. She told the author she had seen one before - an incredible sight given the animal's rarity. She then added she saw it in her uncle's plastic bag. This brief exchange was deeply telling. It captured the tension between ecological awareness and economic necessity: the child understood the animal's value in conservation terms but was also acutely aware of its material worth to her family. A captured pangolin, in this context, could mean food on the table for months. It was a sobering reminder that environmental storytelling cannot exist in isolation from lived realities of poverty and systemic inequality.

On the final visit, a set of draft illustrations from the author was brought to the centre, and the children played a key role in choosing the protagonist's name, outfit, hairstyle, and character traits. An interesting discovery was the children's delight in interactive visuals, particularly scenes where hidden animals were embedded in the background. The children eagerly counted, named, and talked about these animals, which reinforced the decision to include interactive games in the book.

Language diversity and educational disparity also shaped the design strategy. The children's levels of English varied considerably, and literacy was not correlated with age. Many of the children spoke multiple languages, and some were not currently enrolled in formal schooling. Books were typically read aloud by the educator in group settings, meaning that illustrations

would need to carry much of the narrative weight, offering visual cues to support comprehension and engagement for the children listening to the narrative unfold.

7.3. Narrative development with Lewyn Mafala.

The narrative development of the children's book was deeply shaped through an ongoing collaboration with Lewyn Maefala, founder of the Bush Babies Environmental Education Programme and a former Black Mamba ranger. With her extensive experience in conservation education, her strong community ties, and her role as a cultural mediator, Lewyn was not just a consultant but a co-author in the storytelling process. From in-person interviews to continued phone calls, Lewyn helped ensure the narrative was rooted in local realities, cultural resonance, and educational relevance.

From the outset, Lewyn emphasised the importance of recognisability and representation. She stressed that the main character needed to reflect the everyday lives of the children in Maseke - highlighting familiar routines such as collecting firewood, gathering marula fruit, or harvesting Mopani worms. *“If it's from a community perspective,”* she explained, *“then I want the child in the classroom who is reading this story to relate to this character... to say ‘that sounds like me.’”*

Lewyn also provided invaluable input on how to navigate the sensitive topic of poaching. Rather than presenting it in a didactic or moralising way, she encouraged a narrative that offers a gentle approach for children to see the repercussions of poaching from the perspective of the animals, rather than the individual. She explained to the author that most of the children are aware of the violence that poaching bleeds into their community, seeing direct repercussions on people close to them: *“how do we expect people to love what they've never seen? We are teaching these kids to see animals in a different light, but don't underestimate how much they already know about the violence of poaching. A lot of these kids don't have their dads or uncles because of the poaching crisis.”*

Our collaboration extended beyond story structure and moral themes into the creation of characters, where Lewyn offered some of the most transformative guidance. For example, the author initially proposed a chameleon character to accompany the protagonist. In response, Lewyn suggested a shift: *“Chameleons are often associated with bad luck, so I think instead include an owl because kids associate them with wise grannies and good witchcraft, maybe*

have the owl with her grannie? It would give them a familiar scene. I think maybe even a vulture should help her on her adventure, because vultures play such an important environmental role, but people kill them thinking their eyes can help you see the future. Like pangolins and rhino, they should also help the main character - lean specifically on the endangered species the children learn about in the classroom.”

This culturally informed feedback shaped a more layered symbolic world for the story. Her reflections pushed the narrative to reclaim cultural symbols in ways that both challenge superstition and honour traditional knowledge. Lewyn also proposed the inclusion of intergenerational storytelling through a “granny” character, mirroring the role of “bush grannies” in her programme. She emphasized how children in communities are often raised by their grandparents, as parents tend to travel to cities for work. ‘*Grannies in particular are highly respected and an image of wisdom*’. Lewyn also highlighted the importance of broadening the depiction of conservation work beyond the role of the Black Mambas. While the Mambas are powerful symbols, she explained that children should also be exposed to the range of careers available in conservation. Many children, she noted, grow up thinking that only big cities offer work, unaware that opportunities in conservation are growing next door. She recommended incorporating roles such as vets, field guides, gate guards and chefs, suggesting these characters should also be mothers, aunties, or older sisters.



Figure 24. Transfrontier Africa (n.d). Lewyn and her scouts.

Another core aspect Lewyn advocated was language accessibility. She advised that the story be written in simple English and paired with vivid, expressive illustrations, especially since most

children in Maseke are multilingual and English is not their first, second or third language. She explained how books are often read aloud in circles by educators, reinforcing the need for visual clarity and cues that would allow non-readers to follow along. This directly shaped decisions around character design, colour choice, and the inclusion of interactive visual elements. She made a very interesting suggestion that the end of the book should have each animal's illustration next to a real life photo "*most of these kids have never actually seen a rhino or zebra*", to help bridge the gap between imagination and reality, offering children the opportunity to visually connect the animals in the story with their real-world counterparts.

Finally, Lewyn envisioned the book not just as a story, but as a flexible educational tool. She hoped it would align with the Bush Baby lesson plans, integrating into topics like animal welfare, ecosystems, or poaching. "*If you take that book to Joburg,*" she said, "*it won't have as much weight as for the people here.*" This reinforced the project's core aim: to create a book not only about conservation but one that is genuinely for the children of towns like Maseke. Through her insights and creativity, Lewyn helped ensure that the story was not only culturally grounded but emerged from the very community it seeks to serve.

7.4. Reflections and global conclusions on the process and results

This chapter brought together multiple strands of fieldwork conducted across the conservation frontline: immersive patrol observations, interviews and community outreach. Together, these components provided a holistic view of how conservation is lived, taught, and questioned from within local communities. Rather than separate domains, the work of the Black Mambas and the Bush Baby program revealed themselves to be interlinked - two pillars of a wider community-led conservation movement grounded in education, visibility, and representation.

Spending time in the field with the Black Mambas offered critical insight into how these women navigate their roles as conservationists, community members, and public figures. It became evident that they embody a unique balance between discipline and care - challenging gender norms through their very presence, navigating demanding physical conservation work while also serving as role models for the younger generation. Their testimonies revealed pressures, pride, contradictions, and deep motivations behind their work, faced with interpersonal challenges from within and outside their communities - often misunderstood, criticised, and

questioned for performing roles that defy traditional expectation, yet celebrated and idolised by others.

At the Bush Baby Centre, the focus shifted to conservation as education and inclusion. The children's engagement and emotional responses revealed an awareness of environmental issues that was both encouraging yet heavy. Conversations showed that children were not shielded from the realities of socio-environmental conflict and had already begun to internalise its complexities. But through ongoing work, a bridge between these two domains is being built - the Mambas in the field, and the children in the classroom, resonating through the words of Lewyn: "*To inspire behavioural change around wildlife through a community led, multi-generational and non-violent approach*". Lewyn advocated, challenged and passionately co-created the narrative, tone, and educational structure of the children's book, making sure the book firstly culturally represented their community accurately and secondly had the educational tools needed to resonate with the children.

In sum, the fieldwork results demonstrate that co-construction is not only possible but essential. From walking in the wilderness with the Black Mambas, to stepping into the creative imagination of the children of the Bush Baby Centre and ultimately learning invaluable cultural knowledge from Lewyn, the book began to take shape.

CHAPTER 8. THE PROJECT PROCESS

8.1. The Narrative.

8.1.1. Building from mix-research results.

Informed by both the comparative analysis and fieldwork findings, several thematic and structural gaps were identified in existing environmental children's literature. These findings provided a clear framework for the author to address these gaps through intentional narrative and design choices. With guidance from Lewyn Maefala, who ensured the story remained culturally grounded and relevant to the lived realities of the intended readers, the book integrates authentic representation and locally rooted conservation themes. The following table outlines how each gap was consciously responded to in the development of the book's narrative and structure.

| Gap Identified | Narrative Solution |
|---|---|
| Lack of Black African female protagonists in environmental children's books | The central character is Tandi, a young, curious black South African girl who actively engages with the natural world and takes agency in the storyline. |
| Conservation framed as Western-led and disconnected from local communities | Story reflects the town of Maseke, Tandi is from this community and the story features only local characters engaged in conservation; no outside "experts" are present |
| Minimal cultural representation (everyday tasks the reader can relate to) | The story's adventure rotates around Tandi finding Mopani worms (a traditional dish) |
| Minimal cultural representation (native characters) | The characters reflect both what the Bush Baby children requested (name, clothes, hairstyle) and loosely based on real life women the author met in the field (with their consent). The storyline also reflects the strong ties and value of community. |
| Minimal cultural representation (traditional role of elders) | Tandi's Gogo (grandmother in Zulu) will be the catalyst who puts Tandi on her adventure. She will portray wisdom and knowledge |
| Underrepresentation of women of colour in conservation roles | Multiple job opportunities portrayed (guide, ranger, chef, gate guard) |
| Lack of real life role models in community conservation | Each character will be a mother, aunt, neighbour, cousin... to allow a real life inspiration to the reader |
| Educational agency | The book will navigate poaching from the point of view of the animal, with endangered animals telling their story to Tandi |
| Reader engagement | Includes three interactive games to invite participation and critical thinking. |
| Simplicity for early readers and non-english speakers | Complex ideas like poaching were conveyed through relatable visuals & short sentences., crucially overviewed by Lewyn |

Table 2. Comparative analysis results. By the Author. 2025

8.1.2. Narrative Storyboard

The story blurb: *“Join Thandi on an unforgettable journey through the South African bush, as she uncovers the magic of nature, the power of friendship, and the brave women who protect them all. Along this adventure, you’ll discover that heroes don’t always wear capes — sometimes, they wear boots and badges.”*



Table 3. The Narrative Storyboard. Sketched by the Author. 2025

8.1.3. The Story

Thandi's Tales from the Bush follows the journey of Thandi, a curious and spirited young girl from a rural village in South Africa. When her Gogo (grandmother) sends her to find Mopani worms for dinner, Thandi embarks on a quest that leads her through a rich and varied natural landscape, encountering a cast of anthropomorphic animal characters and ultimately discovering the human heroes who protect them: the Black Mambas.

Along her journey, Thandi is guided by three animal companions; Miss Vulture, Miss Pangolin, and Miss Rhino, each of whom shares their story of surviving poaching-related trauma with the help of friends. These stories serve to introduce real conservation issues from the point of view of the animal in a child-friendly manner, emphasising resilience, care, and community action - padded with light-hearted humour. The narrative is interwoven with interactive elements, inviting children to participate in Thandi's adventure. The climax of the story occurs when Thandi meets the Black Mambas Anti-Poaching Unit, local women (her neighbour, cousin and best friend's mum) who are revealed to have played a vital role in protecting her new animal friends. She also interacts with other women who are part of conservation tourism (her friend the gate guard, her auntie the safari guide, and her mother the lodge chef). These encounters reframe conservation not as the work of distant outsiders, but as an inclusive and collaborative effort grounded in community.

The story concludes with Thandi returning home to Gogo with the Mopani worms and proudly declaring that she now knows what she wants to be when she grows up. She reveals a hand-drawn Black Mamba badge on her chest — a gesture of her aspiration to join conservation work.

In addition to the core narrative, the final pages of the book are designed to extend the story's impact beyond the pages by fostering personal connection. This will include an illustrated index of all key characters, each paired with a real-life photo to link the fictional narrative with reality. The animal characters are shown alongside photographs of their real species, accompanied by their names in different South African languages and their tracks. The Black Mambas are introduced by name and image, offering visibility to the real women behind the story and reinforcing their status as local role models. Gogo is pictured next to the real-life Bush Grannies, showcasing the intergenerational scope of conservation work. Next to the image of Thandi, an empty frame invites the reader to draw themselves into the story, reinforcing the

message that they, too, can be conservationists. This is followed by a blank activity page with guided prompts encouraging children to draw themselves as the conservationist they would like to be, guided with a full list of jobs (e.g. ranger, guide, guard, vet, researcher, teacher, chef, maintenance roles, etc). The final page of the book is dedicated to a message directly from the Black Mambas and Lewyn Maefala, offering words of encouragement and solidarity directly from real life role models.

After analysing and finalizing the story narrative with Lewyn, the visual design began. The process is explained below.

8.2. Sketching

8.2.1. Character design

After writing the story narrative, each character's profile was designed.

The illustrations were guided by two key principles: grounding characters in field-based references to reflect the real lives and environments of the intended readers, whilst infusing them with expressive visual language of 1990s adventure animation, whereby the author had artistic influence from the works of animators such as Steve Pepoon, David Silverman, and Stephen Sustarsic. These animators, known for their contributions to *The Simpsons* (1989), *Rugrats* (1991), and *The Wild Thornberrys* (1998), developed a distinct visual style defined by exaggerated features, expressive motion, and bold linework. Their characters often displayed outsized eyes, elastic postures, and dynamic gestures - tools used not only for light-hearted comedic effect, but to convey strong personality and emotion in a way that young audiences could immediately connect with. The choice of doodle-like outlines and exaggerated features was also a purposeful approach to give the aesthetic that a child could have drawn the characters, to allow a further connection between the pages and the reader (this will also be put into practice with the last interactive pages where the reader is encouraged to draw in the book). The design of human characters was ultimately informed by fieldwork interactions. The choice of names, hairstyles, and clothing for these characters were drawn directly from the children and women the author met with during visits to the Bush Baby Centre and on patrol with the Black Mambas. Sketchbooks from these visits captured details that were infused into the visual design.

Below are the designs of each main character in the book:



Figure 25. Character Design. Thandi. Sketched by Author. 2025



Figure 26. Character Design. Gogo. Sketched by Author. 2025

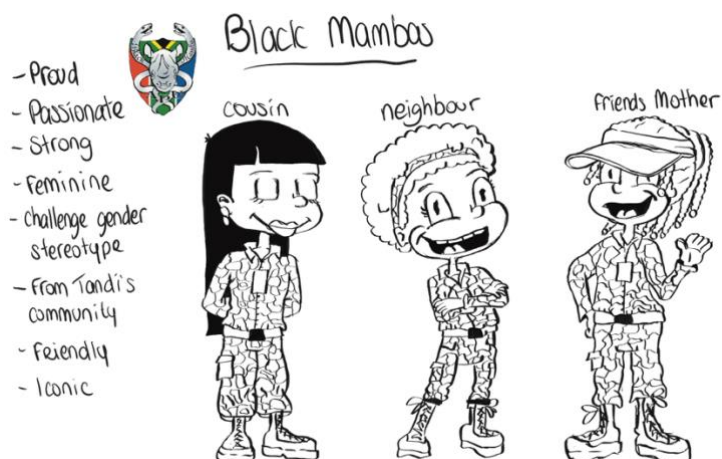


Figure 27. Character Design. Black Mambas. Sketched by Author. 2025

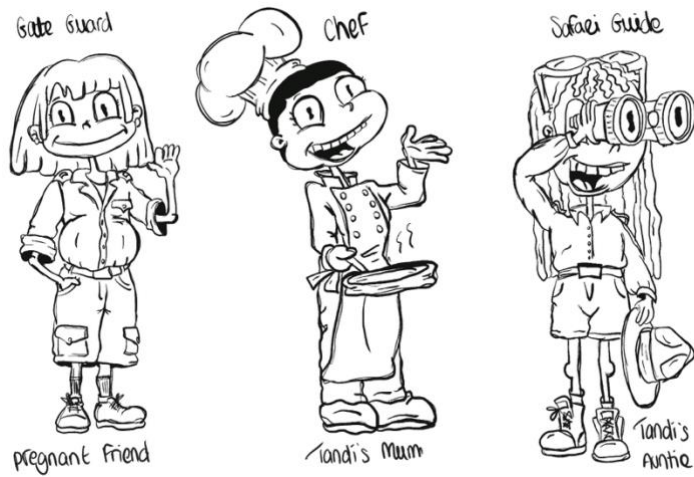


Figure 28. Character Design. Gate Guard, Chef and Guide. Sketched by Author. 2025



Figure 29. Character Design. Miss Vulture. Sketched by Author. 2025



Figure 30. Character Design. Miss Pangolin. Sketched by Author. 2025



Figure 31. Character Design. Miss Rhino. Sketched by Author. 2025.

8.2.2. Landscape design.

The landscapes in the book were designed not just as background decoration, but as an active narrative element that situates the reader in the story's environment and deepens their sense of place. Visual context can play a crucial role in children's literature, particularly in stories that aim to represent a real community or ecosystem. As Nikolajeva and Scott (2000) argue, in picturebooks the setting can serve as a "character" in its own right, shaping the mood, pace and meaning of the story. In this project, landscape design became a key site for communicating both cultural specificity and wildlife richness.

The landscapes in *Thandi's Tales from the Bush* were illustrated to reflect both the real-world environments observed during fieldwork and the imaginative scope of a child's perspective on nature. The visual world Thandi travels through is not a generic 'African wilderness', but a specific setting informed by the Greater Kruger landscape and the community of Maseke. Field sketches, reference photographs, and observational notes taken during village visits and patrols with the Black Mambas served as the foundation for the illustrations. The story starts in Thandi's village, and during her journey the landscape slowly shifts from farmlands to the wild African bush.



Figure 32. Landscape Design. Village. Sketched by Author. 2025

Drawing from the village of Meseke and surrounding areas, recognisable landscape features from the local environment were integrated into the illustrations. Figure 35 depicts the village landscape: open, neighbourly, and community grounded. Elements such as thatched rondavel-style houses, hand-tended vegetable gardens, farm animals wandering freely, small agricultural plots, gives a calm and community familiarity. These visual cues are meant to evoke a sense of safety, routine, and belonging - anchoring the reader in Thandi's home environment.



Figure 33. Landscape Design. Bush. Sketched by Author. 2025.

In contrast, Figure 36 shows examples of the bush landscape, which Thandi traverses on her way to meet the Black Mambas. Here, the scenery becomes wilder and more immersive: tall, twisting grasses, intricate jungle-like plants and trees, a variety of wild insects and animals peeking into the frame. The composition becomes more layered, creating a sense of depth and

movement. The bush scenes were designed to feel alive, almost buzzing, to convey both the beauty and the wilderness of the natural world. This reflects the Black Mambas' work environment, while also inviting curiosity and adventure in young readers. As Salisbury and Styles (2012) note, a richly drawn environment can invite repeated looking, rewarding readers with new discoveries on each viewing.

By designing two distinct but interconnected landscape types, the illustrations mirror the narrative arc: from the known to the unknown, from home to adventure. The contrast also supports environmental education goals, by visually distinguishing between human-shaped and wild ecosystems. For the Bush Baby students who live near these environments, the recognisability of the landscapes affirms their own surroundings as worthy of storytelling. For readers elsewhere, the landscapes offer a vivid window into a different world.

8.2.3. Colour choice.

Colour in picturebooks operates on both an aesthetic and a symbolic level, shaping mood, guiding attention, and contributing to the story's meaning, carrying an "emotional charge" (Salisbury and Styles, 2012), while also anchoring a child reader's perception of character and place. In this project, colour selection was a central design decision, used deliberately to create an inviting atmosphere while ensuring cultural and ecological authenticity. The book employs a warm pastel palette throughout, chosen to create a sense of softness and approachability. This decision was guided by the desire to represent the natural environment of Kruger National Park and its surrounding communities in a way that felt recognisable but not overwhelming. Plants and animals were rendered in tones that reflect their real-life colours but softened into a storybook register. This not only preserves ecological accuracy but also ensures that the images remain playful and comforting for young readers.



Figure 34. Colour Choice. Main Characters. Sketched by Author. 2025.

The human characters were coloured with careful attention to representation. Multiple skin tones and hair types were included to reflect the diversity of people in the local communities, to offer inclusive identification for child readers and emphasise the chance of seeing themselves in books as both mirrors and windows onto the world.

Thandi wears simple purple dungarees and a t-shirt. Her outfit was chosen to be “everyday” rather than aspirational, ensuring she could be read as an ordinary child any reader might know. Importantly, this decision was also influenced by the children the author met during fieldwork in Maseke, who contributed ideas and affirmed the relatability of Thandi’s appearance. The adult figures were likewise coloured and dressed in specific representational intentions. Gogo, the elder character, was designed to represent older women in the community: her bright clothing and patterned fabrics reflect both her individuality and cultural vibrancy, echoing the textures and colours seen during fieldwork. The Black Mambas were depicted in their real uniforms to emphasise their professionalism and credibility as conservation rangers. Everything about their uniform was carefully observed and recreated, from their boots to their badges. Other characters with professional roles, such as the chef, the gate guard, and the safari guide, were also illustrated in their job attire. This decision not only anchors them in recognisable professional contexts but also challenges gendered assumptions, allowing children to see women wearing uniforms that have historically been more associated with male work. In doing

so, the book introduces new possibilities for how children might imagine women's roles in conservation and related professions.



Figure 35. Colour Choice. Landscape. Sketched by Author. 2025.

Alongside colour, line work was also used strategically to reinforce visual hierarchy. Main characters on each page - such as Thandi or the animals she speaks to, were drawn with bold black outlines, making them visually distinct and clearly legible as the narrative focus. By contrast, the background elements (trees, grasses, distant animals) were drawn without outlines. This stylistic choice softens their forms and creates a looser, more dreamlike quality, suggesting movement and atmosphere rather than narrative importance. The result is a dynamic interplay between clarity and fluidity: children can easily locate the story's focal point, while still being immersed in a rich and enchanted natural setting.

8.2.4. Typography

For this project, the font OpenDyslexic was chosen to support the reading experience of children who may be learning to read, including those for whom English is not their mother tongue. OpenDyslexic is an open-source typeface created by Abelardo González (2011) designed to support readers with dyslexia by addressing common challenges in letter recognition. The letters have heavier bottoms, which has been known to help indicate their orientation and make it easier to identify the correct character, minimizing the possibility of letters being misread or rotated. While scientific studies on dyslexia-friendly fonts have shown mixed results, anecdotal evidence suggests that OpenDyslexic can support early and

multilingual readers by providing clearer visual cues for letter identification (Kelion, 2012), making it a practical and inclusive choice for educational materials aimed at developing literacy skills.

8.2.5. Layout

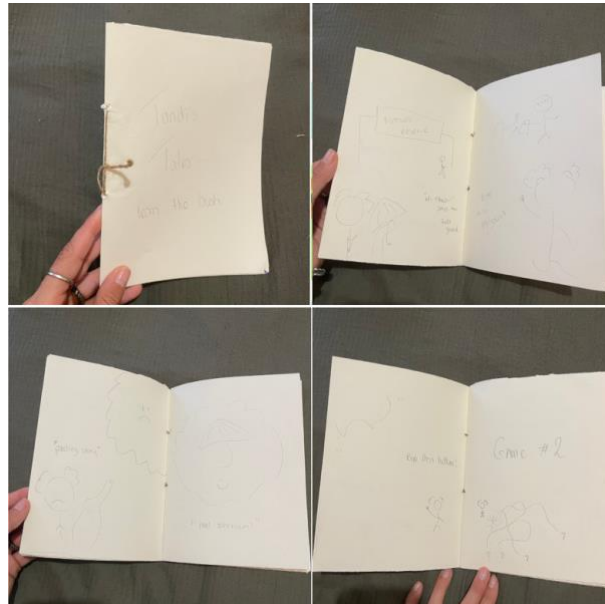


Figure 36. Book draft. Images by Author. 2025.

To complement the typography and ensure an engaging reading experience, a preliminary homemade prototype of the book was created using sketches and rough page layouts. This allowed the author to test the story's pacing, page order, and interactive elements before proceeding to the final printing stage. For example, careful attention was given to the placement of the interactive game and its answer: these could not appear on consecutive pages, as the act of turning the page to discover the answer is part of the narrative's suspense and interactivity. Similarly, the section describing the role of the Black Mambas was deliberately spread over two pages to emphasize the climax of the story and highlight the significance of their work. Creating this physical prototype ensured that the story flows effectively in tandem with the act of turning pages, allowing readers to engage fully with both the narrative and its interactive elements. During this process, the author had to rectify and add pages so that the story flow made sense, making this process one of the most crucial steps of creating the book. The combination of thoughtfully chosen typography and carefully planned layout worked together to create a seamless, accessible, and enjoyable reading experience for the audience

CHAPTER 9. THE FINAL PROJECT: 'THANDI'S TALES FROM THE BUSH'

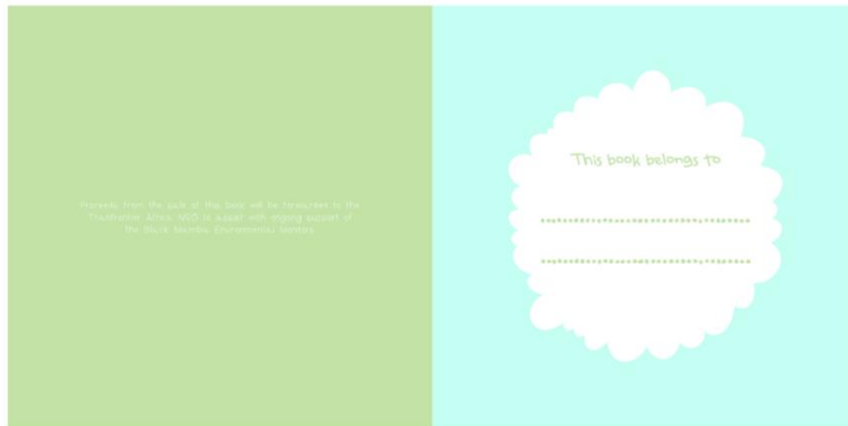
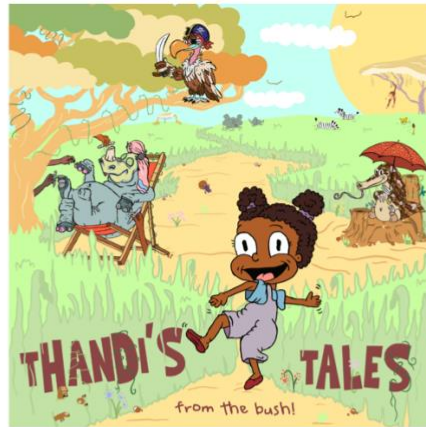


Figure 37. The Final Project. By the Author. 2025

Please see **APPENDIX I** (p.91-98) for the full book.

CHAPTER 10. CONCLUSION

10.1. Project Goals, Key Insights, and Reflections on Storytelling for Change.

This project began from the recognition that there is still a persistent divide in conservation, where local communities remain alienated from Western conservation ideals, too often overshadowing Indigenous perspectives and inclusion. Within this imbalance, women from marginalised communities remain largely excluded from mainstream narratives of conservation, and this lack of representation can limit the potential for younger generations to see themselves in such roles. The thesis therefore set out to investigate how visual culture and design could be mobilised to narrow the gendered and racial gaps in conservation, and to serve as a channel for fostering environmental awareness among children from communities living alongside protected areas. The chosen approach was the creation of a children's illustrated book, co-constructed with the Black Mamba APU and the Bush Baby Environmental Education Program, that aimed both to highlight South Africa's first all-female anti-poaching unit and to provide local children with visible celebrated role models from their own communities.

In pursuing this goal, several key insights emerged. The process affirmed the centrality of representation and early role models in shaping children's aspirations and demonstrated the importance of narrative co-creation in ensuring cultural authenticity and relevance. Fieldwork with the Black Mambas APU and community outreach through the Bush Baby program provided essential perspectives, while the iterative process of illustration and storytelling transformed complex conservation realities into forms accessible to young audiences. The project also highlighted the reflexive nature of design-led research, as storytelling required balancing creative interpretation with the responsibility of remaining faithful to the voices and experiences shared by participants. In this sense, the project illustrates how visual storytelling can function simultaneously as a method of engaging children with conservation and as a means of amplifying the voices of those often excluded from its narratives.

By addressing the underrepresentation of women from marginalised communities in conservation through a co-created children's book, this project sought to demonstrate how design and visual culture can intervene in shaping more inclusive narratives of environmental conservation. The process also revealed the practical and conceptual challenges inherent in such work, which must be acknowledged to situate the project within its real-world constraints.

10.2. Limitations

Three key limitations emerged during the completion of this project. First, there was insufficient time to conduct a reading of the book and gather participants' perceptions of the finished project. Because the design process was co-created and dependent on coordinating with others' schedules, it took longer than anticipated and could not be brought to the audience within the project timeline. The book's production also took place in another country, away from the intended readers, which restricted its accessibility and the possibility of obtaining direct feedback during the process from the children it was targeted towards. In addition, the fieldwork itself was limited: interviews and observations were conducted with only a handful of Black Mamba rangers, community engagement was confined to one village bordering the Kruger National Park, and interaction with children was limited to one school within the Bush Babies program.

Finally, the research was geographically and contextually specific. It focused on a single area in South Africa, meaning that its findings cannot be assumed to represent the dynamics of conservation and community engagement more broadly. The tensions between local communities and conservation structures are not uniform; they vary significantly between countries, regions, protected areas, communities and between NGOs operating in similar contexts. As such, the conclusions of this project should be understood as situated insights rather than universally applicable claims.

10.3. Future possibilities of the project

Immediate future

The author intends to present the children's book to donors affiliated with the Black Mambas project with the aim of securing financial support for publication and large-scale distribution within the Bush Baby program, and potentially to a wider readership. Such dissemination could simultaneously provide educational value for children while generating proceeds to sustain the ongoing work of both the Black Mamba and the Bush Baby initiatives. In the meantime, prototype editions of the book will be shared with the Bush Baby program in the coming year to facilitate direct engagement with children in the target audience. Although this lies beyond the timeframe of the present research, it represents an important step in assessing the book's reception and pedagogical potential.

Broader possibilities

The co-creative storytelling model employed in this project offers wider applicability to other conservation and community-based contexts. Future research could explore how such approaches function across different countries, regions, protected areas, or NGO frameworks, studying different dynamics between local communities and conservation. The title *Thandi's Tales from the Bush* was deliberately conceived with a view of continuity, providing a flexible framework for future iterations. This structure could enable the development of *Thandi's Tales from [...]* in collaboration with other NGOs or community-led organisations, thereby expanding the series while maintaining its core emphasis on representation, local voice, and conservation education. Such extensions would not only broaden the reach of the project but also contribute to understanding how storytelling can mediate local-global conservation relationships in diverse contexts.

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APPENDIX

APPENDIX I. 'Thandi's Tales from the Bush'



"We need more WIGGLY Mopani worms for dinner! Your Mama will have some at her work. Do you feel like an adventure, Thandi?" asks Gogo.

"Yes, yes, yes! I love adventures!" answers Thandi.

"Great! So you don't get lost, I have asked a SPECIAL helper to guide you to find your Mama. Your helper is waiting for you in the Baobab tree" says Gogo's wise, old owl.

Can you find Thandi's helper in the Baobab tree? She's a big bird of prey, she likes to eat dead animals and has sharp eyes!

It's Miss Vulture!

She knows Gogo very well, and is more than happy to guide Thandi on her journey.

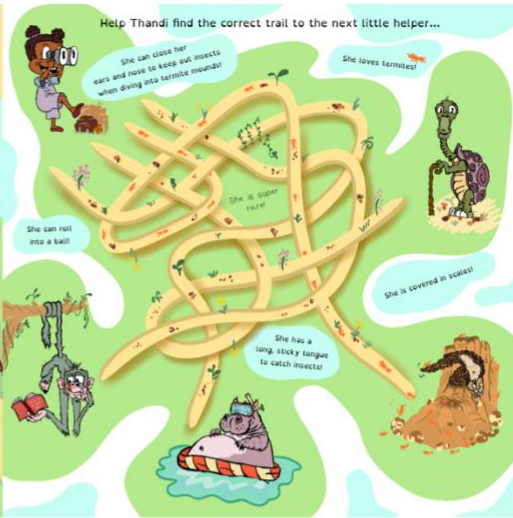
As they are flying along, Thandi notices something odd. "Excuse me Miss Vulture, I don't mean to be rude, but you seem to be missing an eye...did you lose it?" asks Thandi.

Miss Vulture explains how she was captured by poachers who wanted to steal her powerful eyes.

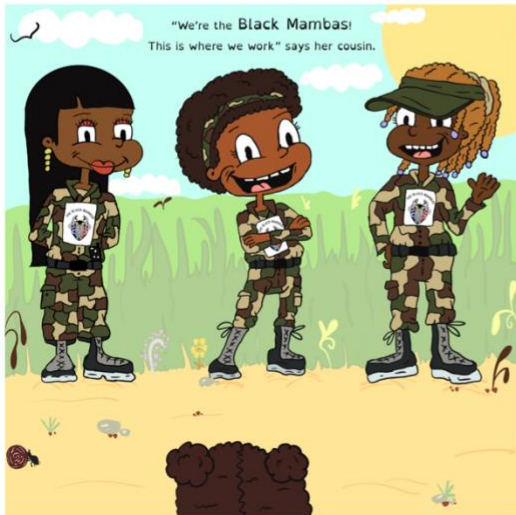
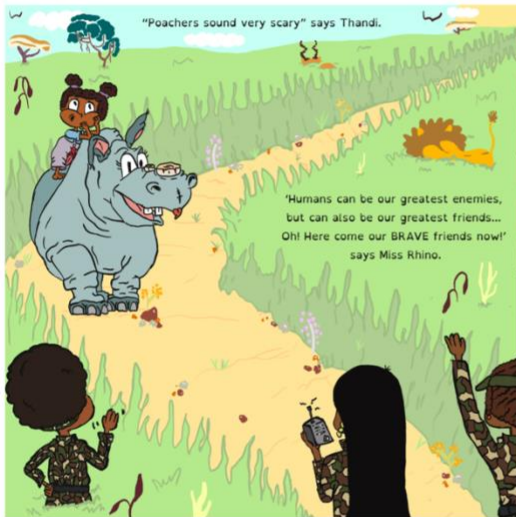
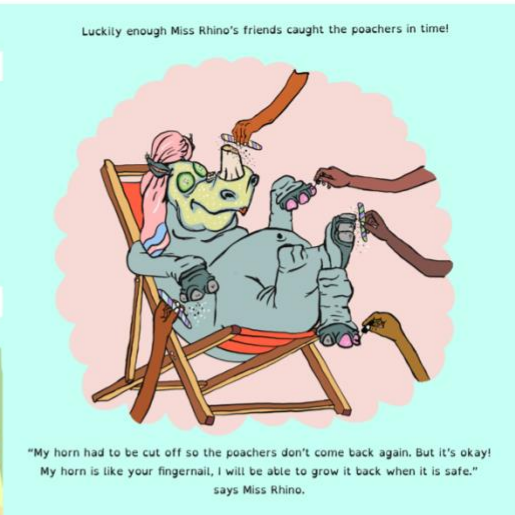
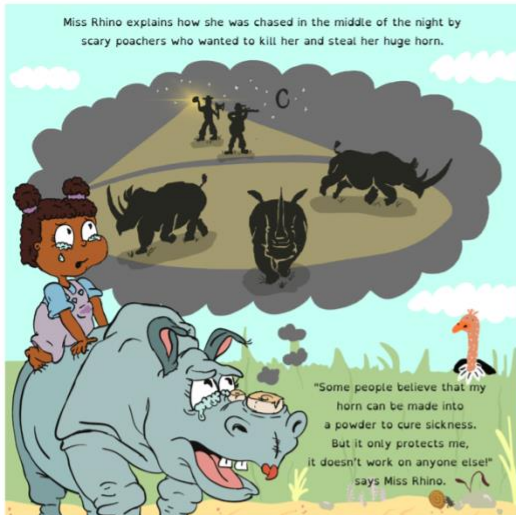
"Some people believe that my sharp eyes can help them see into the future. But my eyes only work for me, they don't work for anyone else!" says Miss Vulture.

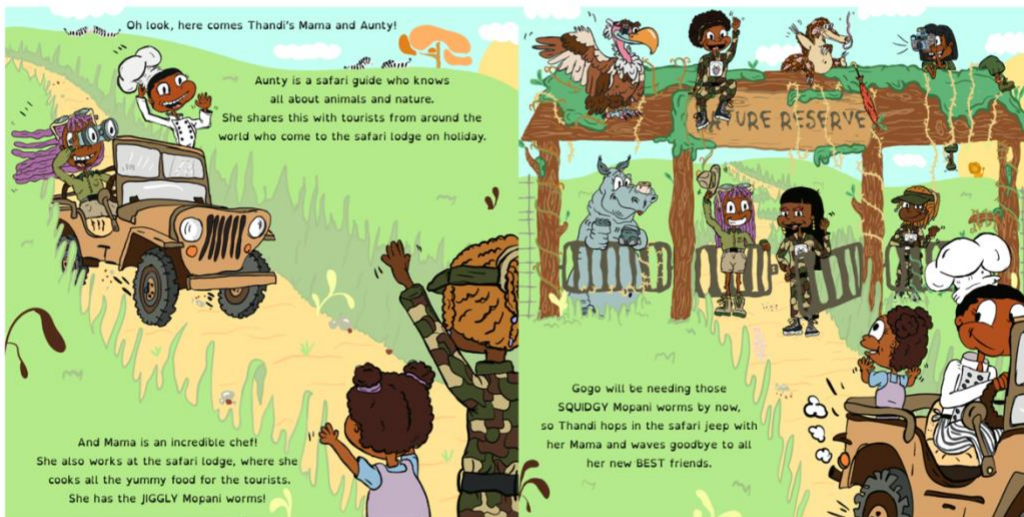
Luckily enough Miss Vulture's friends saved her in time!

"I still have one good eye, and the eye patch makes me feel like a pirate!" says Miss Vulture.











I WILL BECOME A BLACK MAMBA
AND PROTECT ALL MY NEW BEST FRIENDS!



MEET THE HEROES!



Vultures are nature's important clean-up team, including the Miss Lappet-Faced Vulture here!

They eat what other animals leave behind, which keeps the bush healthy and free from sickness.

Fun fact: A vulture's wings can be wider than a person is tall!

Pangolins are very shy, and love to eat termites. When they feel scared, they curl up into a little ball protected by their strong scales!

Poachers hunt them for their precious scales, making them the one of the most protected animals in the world.

Fun fact: A pangolin's tongue can be longer than its whole body!



Black rhinos are strong and can run very fast! They eat leaves from bushes and trees with their pointy lips. They probably need glasses because of their very bad eye-sight.

There are not many left because of poaching, so we need to work together to protect them.

Fun fact: A rhino's horn is made from the same stuff as our fingernails!

The Bush Grannies are the Matriachs of the bush!

They know lots about animals, plants, and how to take care of the land. They love teaching children through stories, songs, and games, showing that everyone, big or small, can help protect nature.

Fun Fact: Some of their stories are hundreds of years old and have been shared from grandparent to grandchild!



BUSH GRANNIES



BLACK MAMBAS



The Black Mambas are the very first all-women anti-poaching team in the world!

They go on patrols every morning and night to check for dangerous traps or poachers. True inspirations, keeping animals safe every day!

Fun fact: The Black Mambas have removed 1471 snares in 6 years! And not one rhino has been poached since they started patrolling.

DRAW YOURSELF AND YOUR OWN ANIMAL BEST FRIEND!



APPENDIX II. Memorandum of Understanding between The Researcher and Transfrontier Africa's Black Mambas Anti-Poaching Unit



Institution: Universidade Europeia - IADE
Research Coordinator: Hugo Passarinho

MEMORANDUM OF UNDERSTANDING

between

Matilda Carne (hereinafter referred to as "The Researcher")

and

Transfrontier Africa's Black Mambas Anti-Poaching Unit (hereinafter referred to as "The Black Mambas")

Date: 03/03/2025

1. Purpose of Agreement

This Memorandum of Understanding (MoU) establishes the terms of collaboration between The Researcher and The Black Mambas regarding the development of a children's book that highlights the experiences and contributions of the Black Mambas in conservation and anti-poaching efforts. The project seeks to amplify the voices of the Black Mambas, promote gender and racial diversity in conservation, and inspire young readers through visual storytelling.

2. Scope of Collaboration

The Researcher will:

- Conduct interviews with members of the Black Mambas.
- Accompany (if applicable) the Black Mambas on patrols to observe and document their work.
- Use illustrations and storytelling to authentically represent their experiences in a children's book.
- Ensure that the narrative remains true to the voices and perspectives of the Black Mambas.

The Black Mambas will:

- Share their personal and professional experiences voluntarily.
- Provide insights into their conservation efforts and the challenges they face.
- Review and provide feedback on the book's narrative and illustrations before publication.

3. Ethical Considerations & Consent

- Participation is entirely voluntary, and members of the Black Mambas have the right to withdraw from the project at any time.
- The Researcher commits to portraying the Black Mambas with accuracy, dignity, and cultural sensitivity.
- The Black Mambas retain the right to review and approve the final manuscript before publication.

4. Rights & Acknowledgment

- The Black Mambas will be credited in the book as key contributors and narrators.
- The Researcher will ensure that the book acknowledges the work of the Black Mambas appropriately.

- Any proceeds from the book (if applicable) will go primarily towards the Black Mambas organization to support their conservation efforts, training, and operational needs, whilst a small portion of the sales may be retained by the Researcher to cover publishing costs.
- The Black Mambas will receive [X] copies of the final book for their personal and organizational use at no cost.

5. Presentation and Publicity Rights

- The Researcher reserves the right to present and showcase this work at university conferences, exhibitions, and other relevant events.
- The Black Mambas also reserves the right to present and distribute the book within their own networks and for their own outreach efforts.
- Both parties agree to credit each other appropriately when showcasing the work.

6. Confidentiality & Data Protection

- Any information shared in interviews or fieldwork will be used solely for the purpose of this project.
- Personal identities and private details will only be included with explicit consent.
- Any sensitive information or personal experiences shared by the Black Mambas will not be published without their explicit consent.
- The Researcher will comply with ethical standards for data protection and storytelling.

7. Agreement Duration & Review

This MoU will remain in effect throughout the duration of the project and can be reviewed or amended by mutual agreement at any time.

8. Signatures

By signing this MoU, both parties acknowledge their understanding and acceptance of the terms outlined above.

Matilda Carne

The Researcher

Signature: 

Date: 08/09/2025

[Representative of the Black Mambas] Valeria van der Westhuizen

On behalf of The Black Mambas

Signature: 

Date: 09 September 2025

APPENDIX III. Transcription of Black Mamba snare sweep interview.

The Researcher: So the idea of my thesis project is to create a children's book narrated by your stories and illustrated by myself. I think children's books are a really good tool for education and my thoughts were creating a book that represents a diversity of gender, race and to challenge stereotypes while educating on conservation in a child friendly way. [...] Would you like to take it in turns and say why you started as a BM, why you think it's important work, what you think kids should know about what you do, if that's okay?

Nkateko: Okay so my name is Nteko Letti Mzimba, one of the black mambas anti poaching unit - I'm a driver and sergeant. So the reason why I left my family and come to work here for shifts of 21 days is because I love nature and another thing i'm thinking about is the community where I came from. We've been raised in the village where we live very close to the KNP [Kruger National Park] but we didn't have any chances to go and see animals live, we just only see on

tv, magazines, hear on the radio - so for my side being a black mamba was a great opportunity as now I see loads of animals life, I don't pay any cent to see them. The reason why I keep protecting those animals, is I heard that there were dinosaurs like extinct animals which I never had an opportunity to learn about but now at my age I hear about the rhino which is like the dinosaur which is going extinct which means I must try my best to take care of them for the sake of the young ones. Here at the BM we have the Bush Baby and Bush Granny program. Our kids and our families at home get access and a chance to come here and stay with us during holidays to see the animals. We show them why we are, why we protect our animals, why we are away from them, and our decision to stay in the bush. So we want them to see the animals' lives, not to just read about them as I did when I was younger. So that is one of the reasons I am here.

Also to empower the women! Because so many people think that this job is for men, I wanted to prove to the whole world that even ladies like me can work in the bush under big 5 [animals] without guns. And so many people don't understand why we've been in the bush for so many years without guns, they don't know the reason - but us we know the reason why. The reason is this: we don't want to live in a village or community where people have lost their families because of us. If I can come here using guns shooting poachers and killing them then when i go home the community will definitely want to seek revenge because I killed their families. So this is the reason why we don't want to use guns, we only use 5 weapons that we use to protect and take care of our animals, including the communities too.

The first one is Spotlights. So before we knock on duty at night, before this there is commercial game drives taking place and busy shining spotlights up and down - and when they knock off we take over. So the poachers they don't understand 'is it a game drive? Are they rangers? Why are they still shining?'. The second weapon is using Radio phones, as wherever we are we can use them to communicate even where there is no signal. So they can always find our location and situation. The third weapon is a Samsung phone delivered by the company. Previously we were using books, writing all the info down - so when we go back to camp we can read to the manager what we saw in the bush. So if it's a poacher, when my boss is busy reading that you find the tracks of a poacher and it's still fresh, blah blah blah...so the poacher is already out because it's from a book! But the phones that Samsung gives us, it's helping us because immediately I put all the information in the phone and within a second it appears on the system or on the laptop in the office, and then they take action immediately. That is why we are here,

to take care of our animals. And the fourth weapon is going to the community to give the information to the children. It's not easy to teach the old ones or the people of my age because they'll never listen to me. But when you go for the young ones, when they grow up, they know that there were Black Mambas or there were female rangers working at Olifant West, which is a reserve.

So they want to be like us. They are now getting started to see a role model of us because of the information that we've given them. So they grow up behaving that we have to take care of the animals. But the old ones, you cannot change their mind because they're already damaged. They're always thinking about money. When they go to the bush, when they see the rhino, they think of money. Also for the community, we can give them access to come here in the bush to start having a love for nature. So that is the fifth weapon. So we allow the community to come here in the reserve to see the animal's life. Definitely, when they go back home, they'll tell their brothers or uncles or father, like, 'hey I saw the rhino, I saw the elephant, a pangolin'. There are so many species here. And then they'll end up saying 'my favorite animal is a rhino'. So when they tell their brothers this messages, they will think like, 'I'm destroying someone's career. I should stop it immediately'. And then we'll give them the chance to come here. We show them that we love them. They're part of the reserve. They should stop destroying our animals. So that is the reason why we are here protecting all these animals, taking care of them, spending many days here in the bush away from my families. It's because we love nature. We love community. We want to take care of these animals for the sake of our kids at home.

Belinda: I'm Belinda Mzemba. I'm one of the black mambas and I joined in 2014. So the reason I came here to join the black members... I did the field ranger unarmed course at South African Wildlife College in 2007. After completing the course, I didn't got a chance to work in the bush. So in 2014, I heard that they need another group of Mamba's because the first recruit was in 2013, and it was only six members. So they needed 20 more ladies to come and join, so I applied and I came for an interview and they took me, and I go to the training. So because I just studied it and I didn't work in the bush, I was afraid of the animals at the beginning. So when I kept on working and the training we did, it helped me not to be afraid of the animals. So I started loving the animals. I'm working here and I'm raising a girl child, telling her everything about the animals that I'm seeing at the bush. And during school holidays, I'm taking her here to see these animals that I'm protecting. So she started to love the bush as well, and she's participating in the school with a lot of programs including the environment. She's also getting a chance to go

and see animals at the other reserve and go to the camps to see a lot of animals. So when she's here ,I'm working together with her, I'm learning from her and she's learning from me, because a lot of information she got at an early age and now she loves animals. And she is saying that 'mom, one day, I want to be a field guide because I know a lot about the animals'. So by protecting the animals here and sharing the information with my family, they started to support me and love the animals that I'm protecting.

Lucendar: Ok, my name is Lucendar Monyela. I'm a 29 years lady, coming from a local area in Phalaborwa based in Limpopo. I joined the Black Mambas in 2019. I saw the post on our tribal office, whereby the Bush Babies ladies posted the post that they're looking for female rangers. Since I wanted to study about tourism, I saw it as an opportunity to learn more about the animals. And then I went in for the interviews, and then I got the job. So I remember when I started this job and I told my family that I'm going for training, they had an idea that the training that we were doing would be very hard. I'm the weakest one in the family, they never believed in me. But, my best friend, she made me strong and said 'I think you will make it since, well, it's what you want in your life'. So we went for the training, it's like an army training, whereby they taught us teamwork, to work as a unity and then to also be strong. So, since I went for that training, I can say now I'm a strong lady. Because of the challenges of the animals, I know how to read the different animals here in the bush, especially the elephants, I love elephants! That is my favourite animal.

Back then I was raised there by my grannies. We never believed that the animals there had a chance to live. They believed in hunting to get the meat. And they also believe that this area belongs to the black people. I can say to them because they're coming from the chief palace. So they believe that this area is our own. So we make sure that by learning from the black mambas and the information that the old mambas are giving us that the animals, they also have a chance to live so that our bush babies and also bush grannies can also have the chance to come and see the wild animals. And remember, our grannies, they never get that chance to go to Kruger National Park or maybe the reserve to see the animals, to have the game drives. So as we're making sure that the information that we are getting and we give it to them, we restore the information to our grannies. And remember, when you are giving information to the grannies, they don't forget. The most, I can say, the most important people to give information to because they don't forget. They're like the children. When we go to the bush babies camp and then we teach them about how to protect animals, how the animals are important...it's more growing. I

can say we are growing. We are becoming role models, heroes in our community. Because I myself, I can say, we never had a ranger in our local area. I'm the first lady to become a ranger. So they see the importance of the animals and the importance of being a ranger in our community because we're giving them the information and inspiration.

Nkateko: So many Mamba's like her [*pointing to Lucendar*] they were coming from the schools where we used to teach [*Bush Baby program*]. So we grew them in preschool, and then they go to high school, and so after they finish their matric - some of their families don't have money for them to do further study or finish their further study. So as we grew them in primary school and then they grew up, we end up picking them up to become BM's. So they are coming from the bush babies program, we teach them and then they end up becoming what? A BM. It's like we are raising them and now they are joining us. Same applies, her child [*pointing to Belinda*] she's been so many time here and now she wants to be a field guide. So you can imagine, her mum is a field guide and now she wants to be a field guide - where does she get that from? Her mum. A role model.

Belinda: So most of the children in the community they have never been to the reserve before, they see the big 5 on money. My baby, I caught her say 'I see the big 5 in the money and I see the big five in the reserve and saw them alive'. At christmas she saw the big 5 and she was so happy, she took pictures near the rhino. They see it on the book and then get to see it in the the reserve. It makes a huge difference for them, because these animals now become real.

Nkateko: Because poachers they spend so many hours working to set up snares in the bush, so they get tired and don't maybe see us watching them. We stay away and call our supervisors about what to do and next steps, then the back up comes to take them away. We are the eyes and the ears of the bush.

Lucendar: We only gather information. We don't approach anyone when we don't have weapons. And remember, we are women, we cannot fight against the poachers who are men, we are not strong enough.

Belinda: So the poachers are people in the community, they know that the black mambas are the only rangers that are not carrying the guns. So even if they saw us, I believe that they know we are not here to kill them, we are here to protect. That is why they are not fighting with us. Did you hear about the ranger at Timbavati, Anton? They killed him in 2022. At his home, the

poachers came straight to his house, they followed him. Anton was the best ranger, he received so many awards for arresting rhino poachers - you should watch the movie 'the rhino man movie'. He got threats about killing him and killing his family, but he didn't quit his job, he loved his job. In 2022 July, they followed him and came inside his home asking for water - he went to help them but they took out guns and shoot him. 5 bullets. He was in his home thinking he was safe but there's no where to run to, they were chasing him in his home shooting him in front of his children and wife. They were watching him, fighting for his life and die. This is another reason why we don't carry guns, because they know if they are fighting with anti-poachers that shoot them, then they will shoot to kill and also have revenge on our families.

The Researcher: So you then want people to know that you don't carry weapons?

Belinda: Yes, we want them to know. They see that we are free from guns.

Lucendar: They ask us 'how do you survive without guns?' We're not here to kill anyone, we just protecting the animals. We also make sure we are visible on the fence line, so you see us - that's it.

The Researcher: It's also great because it shows people that you don't need a weapon when you're in the bush - it makes the animals less scary, just to be treated with respect.

Belinda: Yes that's another reason why we don't have a gun, we are here to protect these animals - so if we see the lion, we don't keep on following, we respect and leave it alone. Because it is their territory and we are here to protect them, not to follow them and end up in situations where we are then in danger that will make them in danger. We respect the animals.

The Researcher: What is your favourite part of being a Black Mamba?

Nkateko: Sweeping. I love sweeping for snares. I collect so much information, tracking, birds, animal behaviour, wires to collect. My favourite species is also a giraffe. A giraffe once saved my life. That's why when I go in the bush and I don't see a giraffe then eesh I know something isn't right. If the bush is too quiet with no animals then I know something, either lion or leopard...too quiet! One time I was patrolling and it was that quiet, and all of a sudden a giraffe come running fast to us, then turn back, and I said 'why giraffe? Did you just come to say hello? hello!' and we keep on walking and then the giraffe run back for a second time near me and then return back, like a sign! It was because a female lion was in the river bed next to us! It was

in the bend in front of us so could not see it. The warning from the giraffe, it came again and kicked the rocks - so strange, but it was a warning! I would be dead if not for that giraffe.

APPENDIX IV. Transcription of Black Mamba Supervisor, Leitah Mkhabela.

The Researcher: Could you tell me what your role is here and how you became a Black Mamba?

Leitah: My role is a supervisor. I started in 2018 but I joined the group in 2014. From 2014 I just fell in love with the project that I joined and it is just amazing and unique to be a part of the BM ladies. I have passion for it and love at first sight to protect our iconic animals.

The Researcher: How did you first find out about the BM's?

Leitah: So I was attending the Timbavati program in high school and you know sometimes at school it was really boring but then I noticed people going behind the classroom and I was like 'what are they doing?' and I joined them and realised it was a beautiful garden. I went and asked how to join, so every time at study time I would go to the garden and tend to the vegetables and give them to the families that are in need and also sell it to our teachers and some community members. So in holidays we would go to the game reserves and that's where we first saw wild animals for the first time. From there I fell in love. The first animal I saw was an elephant and I was like 'woah'. We saw a rhino, and they told us their story. In my mind I thought the poachers were not shooting to kill, I thought they make the rhino sleep and then cut the horn and then it will grow again. So only to find out that when I'm in the reserve they shoot to kill, I couldn't believe it. But I met rangers there that inspired me. So that's where it started. After my matric my parents didn't have enough money to pay for my further studies, so I decided to join from hearing it through Nocry (a sargent) who was my classmate at school and she joined the BM in 2013 while I was busy planning to go to the city to do a course on nature conservation but mostly in the lodges. So in 2014 I joined the BM.

The Researcher: Great! And now you're a supervisor, what does that entail?

Leitah: I check the areas where my colleagues stay, check the ladies have what they need, the uniforms, I give patrol orders of where to patrol, together working with the management. In the ops room, I follow the ladies when they go out on patrol, there's a screen that we use where I check where they go to, what they find and all information that they send me, if we have to send people to help, or if there's an animal limping or they see a rhino in good condition. Gather

information, I'm like the computer that communicates with everyone. I check their schedule, how their work is going...yeah there's a lot of work! I can send you a list of it so you can see what I actually do. I run the project with the management, make sure there's enough fuel in the cars, all the instalments needed, the instruments people need to go out in the bush.

The Researcher: You run the show! [both laughs] and so you work from this office?

Leitah: Yes but I don't like it so much, I much prefer being in the bush. I can still go out there whenever I want to. You know there's a lot of information you can get in the bush, I don't like sitting in front of the laptop. When you're out in the bush you learn different things everyday, come across different things everyday.

The Researcher: And so do you think the Bush Baby program is important to the black mambas?

Leitah: Yes, very very much important. It plays a huge role. So the Bush Babies is a sister project of the Black Mambas where we, every Friday, go to the community to teach the kids and have a great time. It's so amazing. Just the experience of the kids coming to the centre and teaching them and playing activities. You know the knowledge they have gained so far is so amazing, the effort they put in the project instead of doing nothing is great, they see the importance of the environment and the importance of the wild animals and the benefits that the community is receiving from this project. They ask so many questions which I like, and they want to understand more and I think they've gained more knowledge than us! We learn a lot from them, it's amazing. They also have a garden where they take care of themselves without anyone telling them when to water. And also we have some kids who if they don't get food from the centre, they don't eat for the whole day. There's a lot of roles that are being played there, there's a lot of emotions when you're at the centre, meeting these kids and getting to know where they come from and their background, how they live at home and how they want to live in the bush when they visit the Bush Baby centre here in the reserve. So many of them have never been out there in the bush. The same way I grew up. But now they have a chance to come here, and to see their eyes go 'oh its a dream come true' immediately we have changed the life of that kids, you can see and tell how they look at the animal, the way they bond with them, they tell their friends, the stories that they tell you can see it comes from their heart. It's just amazing, and it inspires me and fulfills my goal. From that I can see that I've done my best. It is rewarding. So many people think to feel a reward is to receive an award but just to look into

a kid's eyes and see the happiness that they have, the love that they have, the knowledge they gained since they've met you and joined the project...it's a huge reward for me.

It is important that looking at the images of this book you'll be able to tell who these women are and where they come from, and it's very important they see their mum, aunt, neighbor, sister in these characters. This will make young children believe they can do this too.

APPENDIX V. Transcription of Black Mamba fence patrol interview.

The Researcher: So my first question is how you came to join the black mambas 12 years ago?

Colett: Because I love nature. There was a program in my high school like the bush babies program, from grade 9 to grade 10. This program used to visit us at school, teach us about the environment, and nature itself. Then they do the garden for us, we plant spinach and other things. There was this time when they took us on a game reserve in Timbavati, it's where I started to be more in conservation because that was my first time to see elephants while I was in the reserve in real life, not in pictures. To see a rhino was exciting. So that's how it started. After I matriculated, I was not doing anything at all - I was at home. Then there were these posters that came out about starting an all female rangers program at Olifants West, and the program like the bush babies at Timbavati told me that if I'm interested then I can apply. Then I applied, did the interview and passed. The rest is history.

The Researcher: Amazing. And all of this was sort of thanks to a program like the Bush Babies?

Colett: Yes, very much so.

The Researcher: So you think what the Bush Babies program is doing is very important?

Colett: Yes. Definitely. They are the next generation.

The Researcher: What would you say is your favourite part of being a Black Mamba?

Colett: I feel very proud, we are the first all female rangers in the world. We change the mindset that only men can do the ranger thing, even women can do it better. Another thing is I'm now a role model in the community because of the job we are doing. Very respected.

The Researcher: What do you think should be included? [*Researcher shows page illustration draft*]

Colett: I think it's important to have a book like this at an early age, growing up with it. Like ourselves it started in grade ten which is already half a university, so you don't grow up with that information but now starting at a younger age it's good because these children will grow up with this information at an early age. I'll say in my culture there was this belief that wild animals belong to white people because of the fences. But now when we go to school and get educated, these young children can change their mindset of why they should conserve nature. So education is the key, we are able to change their mindset and educate them about conservation and nature itself. Open their eyes to all the opportunities in conservation, so many opportunities. For example you can be a doctor in conservation! You can be a vet. You can be a teacher in conservation, you can be an environmental educator facilitator, you can be a police in conservation because you can be a ranger. And then again you can be a leader in conservation because you can be a guide. While people visit you can take them out and teach them about the animals and show them this beautiful iconic reserve.

The Researcher: And do you think having a children's book will help this?

Collet: Yes, I do! It will help because thanks to this book they can share the information they learnt, and show the book to their parents and grandparents. It will definitely be so useful and a fun way to educate them and also they can identify with the character, which you don't see in a lot of children's books here.

APPENDIX VI. Transcription of first interview with Lewyn Maefala.

[The start of the recording had technical issues, this is from halfway into the interview.]

The Researcher: Do you think there should be real photos included in the book?

Lewyn: Yeah, I think so. Because some animals they've never seen, so how do they relate to this? Also the program stands for: 'how do we expect people to love what they've never seen?'. And now what I'm trying to do is be their eyes. I've seen this and I'm trying to show them - but when I feel that is not enough then I bring them to come see it themselves. I like to bring the bush into the classroom. When you say rhino, I want to be like 'oh that's a rhino' [*pointing to the imaginary book*]. You know we've got the grannies that say 'oh that's an elephant!' and I will be like 'duh, yeah that's an elephant' but they say 'oh I've never seen an elephant before!' and then I say 'how do you then know it's an elephant?' and she says 'I saw it on the tv but it was this small [*small mimic with hand*]'.

The Researcher: Then that would make a lot of sense to have a main character, so there's even a comparison of height.

Lewyn: Or you could even have a family in the community that the Mamba is from. Maybe the father or the uncle is a poacher.

The Researcher: So that's also something I wanted to ask you about. Poacher is such a hard word and act, explaining it can be very sad and scary to a child...

Lewyn: Let me tell you this, I became very smart with this...I don't do that - I let other people explain it! [*laughs*]. So the Mambas are the ones who will come in and teach the kids about the poaching lesson. And you know, kids being kids 'oh yeah I know of someone who does this' and you sit there and think 'oh my goddess. I can't ask who it is but what do you expect me to do with that information!' [*laughs*]. We once had this thing with the kids and this child drew a rhino with a human at the damn, and this human is shooting at the rhino. I've never seen this before so I have no idea how an 11 year old knew about this.

The Researcher: I see, I'll have to think more about that. I really like that train of thought you had about 'interconnectivity'.

Lewyn: We also have the grannies on our program. The Bush grannies come in and tell the kids tales around the campfire. That's what I'm saying, maybe have a family in your book. Oh and simple English in the book, very important! I think another reason I'm doing what I'm doing, is because when I grew up I wanted to be a teacher - which is what the majority of kids want to be when they grow up, a teacher, policeman or soldiers - well not anymore because of what happened in the DRC! I had my grandfather, he had a little farm and had turkey, geese, chickens...and we have the responsibility of these animals and I think this is where my love for the animals started. But now I don't want to be a vet, I still want to be a teacher. And then growing up I went to the zoo and volunteered there - I did a junior nature conservation course and that is when i said 'this is what i want, this is what i want to do'. So, even this thing of the chameleon being picked up and you see the kids' eyes go 'woooooah' [reference earlier about folk tale saying that if a chameleon touches you then it will stick to you forever, so kids will throw boiling porridge over it]. I don't know if you've seen our logo but it's a bush baby, as I see my learner as my babies learning about the bush but when you tell them an elephant is not going to kill you their eyes go [motions to big eyes] 'whaaat?' so they have the big ears of the

bush babies so that they grasp all this information that we give to them and take it further into their lives, when they grow up and head towards a career path of conservation.

The Researcher: And so this is the reason you started with Bush Babies? To inspire younger kids to do the same?

Lewyn: Yes, 100%. That and that only.

The Researcher: And you've been doing this for ten years? Incredible.

Lewyn: Yes, I started the bush babies program 10 years ago and I'm still losing some of my hair over it! [laughs]. So I came here as a student to do my practicals working integrated learning for a year, and 3 months down the line Craig [director of Transfrontier Africa] asked me 'is this really what you want to be doing?' and I said no, I want to go to the schools. I said 'I see you've got the anti-poaching unit, you've got the research department that tells the anti-poaching unit the hotspot areas and where the rhinos are. I see you guys are protecting the species but my question is, from whom? Shouldn't it be better that we engage those people that you're protecting them from?' and Craig was like 'yes, what do you want to do?' and I said 'I want to go to the schools'. Started with 3 schools, now we're sitting at 11 schools. We've got a resource centre, even the resource centre we didn't build it! The travel council gave it to us for free. We got kids who are coming onto the program every day.

The Researcher: That's incredible. How have you seen it evolve over the years?

Lewyn: Aye! I've been cruising very nicely. [laughs]. It's a lot, I tend to focus on what happens on the moment. Then, you know duty funding as well...you know when you're hoping to take the Bush Grannies to camp or to incorporate them into the program this year it turns out we don't have funds for them so then we can't engage them. Back in the day, yes it used to be smooth sailing before Covid. Yeah Life was nice, but now it's hard - I have to think every time I write something down 'can we afford it?'

The Researcher: Well that is the idea and goal of this book, is to help you use it as a tool for educating, raising awareness but also making it fun for the kids too! So that's why it's hard to get a narrative together.

Lewyn: Yeah, I really would love to have this book. Maybe even if the book can be digital too?

The Researcher: Yes, of course it could be.

Lewyn: Because we also incorporate and interlink our lesson plans in the existing school curriculum. So we don't say like 'today we are learning mathematics, or english' but through reading this story book it will already be incorporated. So I think it will be of value to the kids to read this book. A book at a community level. If you take that book to Joburg it won't have as much weight as for the people here.

The Researcher: Exactly, my goal and main priority is for your organisation to use it. What would be amazing is if it could work towards any kid, but my main priority is for it to be an educational tool for the children here.

Lewyn: Yes! You know this job...one day I'm gonna strangle someone! [*laughs*]. It gets very tough and hard, you know you're working with people from the community that don't have the same passion, the same vision, it's all about 'give me the money!'. So it becomes a bit hard. But then, the beauty side of it which I love - I'm like the matriarch, the female leader - people follow where I go because I know where the water is, where the food is! Elephants are just my favourite animal. I love their social structure, life is very beautiful.

Lewyn: If it's from a community perspective, then I want the child in the classroom who is reading this story to relate to this character. To say 'wow that sounds like me, because I need to fetch the fire wood, in December collect the marula and January the mopani worms' so that cultural background of the community itself - this child must see himself or herself within this character, I think. And then now this child is growing to understand, they can relate to their older sister who may be a black mamba and she could think 'well little did I know that when my granny was sending me there, this was wrong in a sustainable way'. Just a change of behaviour, as in the community the poachers are seen as heroes, but in our community we are fortunate to not have a lot of those. But going to some villages, girl...I've heard a poacher talk about how they go to Durban because there's so much money there but he's just recently been released - and he's going back again! It's not a lesson learnt. I actually asked myself a number of times 'do I actually want to work with that community?' because there's also a safety aspect to it as well, but because remember we are targeting the kids, am I now just expecting the kids to say 'not on my watch', so that's a community I should be focusing more on, to teach the kids...imagine if we took this book into that community? That child would be like 'well I didn't know that was wrong' or 'well i knew this was wrong but didn't know the ripple effect of my families actions. If my dad goes to prison, what will I eat? Can I go to school? Who will look

after us? Now I have to drop out of school' So I think about the reality of what is happening within this landscape.

We have these role models ladies doing a man's job 'when I grow up I want to be like them', changing the perspective from a community level! That's why I'm saying in Joburg, they don't even have rangers so they don't know what a ranger does, and they don't know the challenges of what these ladies have to encounter in the community.

Lewyn: We also do the food security as well for our kid scouts, they come every Friday. So every Friday we have a trip meeting and Monday to Thursday we have this environmental education program so any time we have different lessons. This month we're doing the environment, next month we're doing poaching, so whichever one you'd like to come to - please come!

ANNEX

ANNEX I. Book photography credits



3DE Studios. (2022), *The Mambas* [photograph]



Godfrey, I. (2019). *North team teaching at school* [photograph]



Suter, J. (2016) *Black Mambas on patrol* [photograph]



Munnik, J. & Boswell, J. (2023) *Black Mambas Oct'23* [photograph]



Crull, K. (2020). 1789 [photograph]



Crull, K. (2020). 3181 [photograph]



Dupont, B. (n.a) *Lappet faced vulture torgos tracheliotus on giraffe bones* [photograph]



Veronesi, F. (n.a) *Lappet faced vulture ndutu Tanzania* [photograph]



Oosterwijk, M. (n.a). *Masai Mara Lappet faced vulture eating* [photograph]



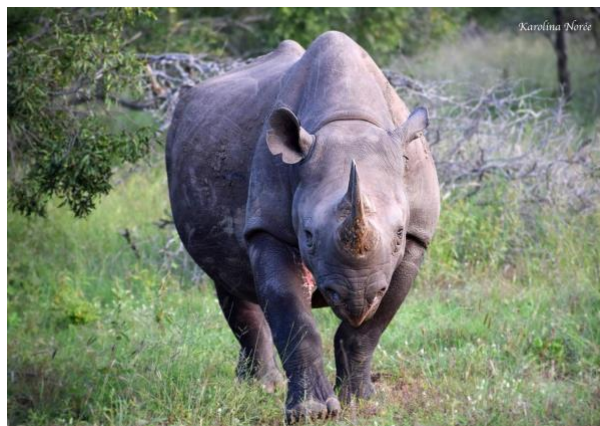
Bongrain, K. (2022). *Pangolin* [photograph]



Noree, K. (2020). *Smell of spring* [photograph]



Noree, K. (2020). *The horns* [photograph]



Noree, K. (2020). *Stare down* [photograph]

