## 3 The Rise and Fall of Protected Areas in Central Africa

## A Historical Perspective

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## 3.1 Introduction

#### The political context of present-day protected area expansion

In view of their new commitments to the Convention on Biological Diversity, many countries are deciding how to increase the area dedicated to nature conservation to 30 per cent by 2030. Proposals vary on how to achieve this, including if 30 per cent is enough (Wilson 2017), and if it will benefit people (Schleicher et al. 2019). Alternatives to strict conservation models are being promoted including "other effective area-based conservation measures" (OECMs) (Dudley et al. 2018; Gurney et al. 2021). However, few consider the impact of these proposals within a historical context.

In Central Africa, some governments intend to pledge to the 30 per cent goals and are already moving towards expanding existing PAs. This is not the first time PAs have been increased: in the 1930s, 1960–70s and 1990s, Central Africa also saw increases in relation to international policies and with the support of conservation organisations (Proces et al. 2020). Although PA degazettement may occur globally (Mascia et al. 2014), and while some has occurred in Central Africa, it remains rare (Walters et al. 2016). The tendency is to create very large PAs (Kashwan 2017).

Despite the new objectives being set by the Convention on Biological Diversity (CBD), at the time of writing this chapter, most countries have not reached the current targets of 17 per cent, including many countries in Central Africa, such as the countries we focus on: the Democratic Republic of Congo (DRC), Gabon, and the Republic of Congo (Proces et al. 2020). Not all proposals to expand current PAs are entirely new, with some having colonial roots. Colonial PAs often have histories related to land dispossession and removal of natural resource rights (Brockington & Igoe 2006; West et al. 2006; Wardell 2020a). Some PAs created in the colonial period were gazetted in areas considered by colonial governments to be common lands without recognised titles (sensu Herzog 2021). The past becomes important when talking about local implementation of international agendas such as the sustainable development goals or the CBD targets. When international targets talk

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about creating or expanding protected areas today, one should understand what happened in the past in these areas regarding similar expansion, under different regimes. History matters, and is not limited to perceptions of the past, but has a direct link to how actors are involved in future projects (Engelstad 2003). A starting point is understanding that PAs were created in "frontier spaces", which upended customary property systems, social dynamics, disregarded customary rights. These legacies live on in people's memories (Walters et al. 2015; Omoding et al. 2020; Gilli et al. 2020).

## Territorialisation through protected area creation

Gissibil, Hohler and Kupper in their book Civilizing Nature: National Parks in Global Historical Perspective (2012) attempt to explain the globalisation of PAs by exploring the varied experiences of establishing national parks through progressive efforts to civilise, territorialise and categorise nature from a historical perspective. Conservation became an integral part of "civilising missions" within nation-states and empires, but also through international or non-governmental organisations and post-colonial states. Territorialisation is the strategic use of bounded space to control resources (Vandergeest & Peluso 1995). It is "not just as an acquisition or as a security buffer but was a decisive means of power and rule" (Maier 2000: 818).

The ascribing of specific activities permitted within these boundaries (Vandergeest & Peluso 1995) is central to our argument in this chapter, as is land control (Peluso & Lund 2011; Wardell & Lund, 2006a). The restriction or outright forbiddance of some activities is significant with PAs, whether in international PA categories (Dudley 2008) or in the national laws and decrees when establishing them (as we will see in the case studies in the next sections). And such territorial restrictions do not equally impact all people (Vandergeest & Peluso 1995). In the colonial era, the colonisers and the colonised were treated differently in terms of resource use and access to areas and resources within them. Priority was typically given to tourists, scientists, and expatriate hunters. Here we focus on the internal territorialisation (sensu Vendergeest & Peluso 1995) during the colonial era, where the colonial empire internally divided its territories across multiple sectors and uses. We concentrate on the creation of PAs.

During the 1933 London Conference, European colonial powers agreed on a definition of a national park that emphasised control by the highest legislative authority and the area's double purpose viz. "the propagation, protection and preservation of wild animal life and wild vegetation ... and enjoyment of the general public". Defining and categorising rendered the imperial world legible and governable and also generated universal standards (Scott 1998). It often neglected, however, the complexities of the socio-cultural ties to customary lands appropriated to establish PAs and the impacts on local livelihoods (Domínguez & Luoma 2020; Wardell & Lund 2006b).<sup>1</sup>

We use the International Union for Conservation of Nature (IUCN) definition of a PA, "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (Dudley 2008). PAs include national parks, reserves, sustainable use areas, cultural landscapes, but also scientific and hunting reserves, and after 1946, United Nations Educational, Scientific and Cultural Organization (UNESCO)-recognised areas (Dudley 2008), with countries recognising PAs in different ways. This latest version of the IUCN classification system represents more than a century of efforts to categorise and classify the animal and plant kingdoms and the spaces they occupy.

Territorialisation is a process that occurs in "frontier spaces", which are "... novel configurations of the relationship between natural resources and institutional orders that happen at particular moments in particular places" (Rasmussen & Lund 2018: 388). Although we will show a link between colonial history of PAs and some current proposals for PA expansion, we show how the interaction today in creating new PAs is likely influenced by historic frontier spaces where colonial policies radically changed people's association with their lands and resources.

In this chapter, we focus on the history of PA creation in Gabon and DRC, linking it to colonial and post-colonial state territorialisation in conservation frontiers, encouraged by the CBD targets to protect 30 per cent of national lands and waters by 2030, which are still being negotiated at the time of writing this chapter. We concentrate on colonial and modern PAs, where colonial-era PAs were gazetted and then either forgotten or degazetted. In some cases, these same areas are now being resurrected and considered for regazettement, with new efforts to consult communities. We trace territorialisation over time in the Mont Fouari colonial hunting reserve (Republic of Congo/Gabon), the Reserve Floristique de Yangambi (DRC), Lomami National Park (DRC), and the Plateaux Batéké National Park (Gabon) (Figure 3.1). We ask: What are the consequences of colonial and post-colonial territorialisation on people and conservation? What can be learned from the history of colonial-era PAs when we think about the 2030 goals?

The first part of this chapter provides a historical context to colonial PA creation. This is followed by four case studies illustrating a forgotten scientific reserve, the degazettement and potential resurrection of a hunting reserve, and the creation of two new PAs, one of which benefited from colonial resettlement policy and the other which held participatory consultation for its establishment. We show how colonial attempts to territorialise their colonies through the creation of various reserves (e.g. hunting, floristic) continue to live on in new proposals for modern PAs. We reflect on the consequences of these types of proposals, and whether resurrecting colonial-era PAs is good for people and biodiversity.

## 3.2 Colonial roots of PAs

Although the colonial period began much earlier, the period after 1895 witnessed significant social, economic, political, and environmental changes throughout the



*Figure 3.1* The four study areas in Gabon, Republic of Congo and Democratic Republic of Congo. Source: UNEP-WCMC (2022)

region as African communities were confronted with increasing demands for labour, for commodities and for African territory. The extension of political control by the French, Germans, Belgians, and British raised the issue of ownership, management, and access to land and forests. Africans were affected by the establishment of colonial states and institutions such as Forestry Departments, as well as efforts to integrate local production systems into the global economy (Tilley 2011). However, these forces interacted continuously with long-established patterns of customary land and resource use, labour extraction and migration, social change, and internal trade. Africans were persistently framed as profligate land and resource users who encountered the "empire forestry mix" (Barton 2002) in different places, and at different times. Empire forestry models comprised three main elements: the appropriation of lands to create forest reserves, the establishment of Forestry Departments, and the production and marketing of wood fuels and other non-timber forest products (NTFPs).

These empires also sought to conserve colonial resources. A series of meetings following the 1900 London Conference led up to a consolidated international conservation movement (Adams 2004). A key moment was the 1933 London Conference where France and eight other countries promised to conserve fauna and flora, including in their colonies. This resulted in an increase in the creation of PAs, including in Central Africa (Phillips 2004), which were added as a form of

territorialisation to the existing forestry and rubber concessions. However, not all colonies reacted in the same way; we next focus on the Congo Free State (Democratic Republic of Congo – DRC) and French Equatorial Africa (AEF).

#### The Congo Free State and the Belgian Congo

The Congo Free State was the only African signatory to the first 1900 London Convention relating to wildlife preservation in colonial Africa. This, and the subsequent 1933 London Convention on the preservation of fauna and flora, were critical in promoting and defining conservation enclosures, which served as a blueprint for establishing PAs well beyond the African continent (Cioc 2009). In addition, both London Conventions and the 1902 Paris Convention for the Protection of Birds Useful to Agriculture adopted an approach based on categorisation. Hunter-naturalists of the 19th century, scientific foresters, hunting interests of colonial administrators, and the British Society for the Preservation of the (Wild) Fauna of Empire (SPFE) created in 1903, were all also instrumental in "framing global environmental problems and instigating conservationist policies across empires and nation states" after 1900 (Gissibil et al. 2012: 6; Grove 1995, 1997; see also Beinart & Hughes 2007: 289-309; Adams 2004). The early political pressure was to protect a particular, narrowly conceived human interest - the preservation of a sufficient supply of wildlife to satisfy the hunting community whose "naked utilitarian perspective was made explicit in the preamble" (Bowman et al. 2010).<sup>2</sup>

It took more than 15 years, however, before PAs had a secure legal footing in the Belgian Congo. The Parc National Albert, renamed Virunga National Park after 1969 (Languy & De Merode 2006), was the first PA established by decree in the Belgian Congo in 1925, a year before the first Lake District National Park was created in the United Kingdom. A law promulgated by the Government of Belgian Congo in 1908 noted that "The Governor General sees to the conservation of the indigenous populations and to improve their moral and material conditions of existence". Furthermore, a decree adopted in 1934 defined the processes involved in the acquisition and compensation of native lands. A first legal instrument to establish the Congo Park Guard Corps was only adopted in 1958 shortly before independence. The term "protected area" was first introduced in the DRC, however, in a decree in 2010 and reaffirmed by the Law # 14-003 on the Conservation of Nature in 2014. The creation of PAs and the fixing of their boundaries have resulted, in many cases, in depriving individuals and communities of the use and right to their customary lands. For the most part, the individuals or communities affected by the creation of PAs have not obtained fair and equitable compensation (Mirindi 2008). More recent research has suggested that protected areas in the Congo Basin are failing both people and biodiversity as poaching persists, undermining customary land rights, with widespread land conflicts in and around PAs, and diminished local livelihood opportunities (Pyhälä et al. 2016; Bifane Ekomi et al. submitted).

#### French Equatorial Africa

Colonial concessions in French Equatorial Africa (AEF) were attributed an early and important role in colonial territorialisation, as it was seen as a way of reducing the fiscal burden of colonisation on the metropole. The Rapport sur la Colonization des Compagnies de Colonization published by the Ministry of Commerce, Industry and the Colonies in 1890 was followed by a Consultative Commission on concession requests, established by decree on 16 July 1898. In 1899, France became the sole owner of lands and waters (Legault & Cochrane 2021). From 1899 to 1900, 40 decrees allocated 70 per cent of the AEF to private concessionaires, with areas varying in size from 200,000 to 14 million hectares. Many of these concessions failed and timber concessions did not have the economic impact intended either for the colony or local people (Hymas 2015).

The AEF's first PAs were created in 1929, focusing on strict PAs and hunting reserves; the first national parks were: Goz-Sassulko (Chad), Bamingui and Mtoumara (Oubangui-Chari), and Odzala (present-day Congo) and several reserves de faune for a total of 11 million hectares (Tchakossa citing Ruis 1956: 60). In 1931, Governor General Antonetti was inspired to create national parks based on those in the Congo Free State and South Africa (Tchakossa 2012). After the London Conference in 1933, other PAs were created including, in 1935, the Réserve de Faune de l'Offoué and the Lopé-Okanda National Park in 1946. These areas were heavily regulated, with a strong focus on hunting with the first decrees in 1916. By 1930, sport hunting permits were designated; according to Tchakossa (2012), these contrasted with traditional hunting laws that managed wildlife. Local hunters were typically excluded, an issue we will see in the case studies below. Sport hunting was extremely popular, and some hunters were noted for killing some 700 animals (Tchakossa 2012). Publishing popular books on colonial hunting was prevalent (e.g. Augias 1928; Ramecourt 1930; Dheur 1938, 1939; Weite 1954; Soret 1959; Roulet Roulet 2004; see also Mackenzie 1998 and Beinart & Hughes 2007).

Guidebooks in English and French published in the 1930s united the ideas of hunting and conservation. Game management was meant to deliver income to protect the fauna and so hunting-related businesses were encouraged by the Comité de Tourisme et Syndicats in Brazzaville (Anon. 1938). Hunting was further stimulated by France's 1946 Société Zoologique de France conference on hunting in the colonies and the creation of the Comité des Chasses Coloniale Française at the Musée National d'Histoire Naturelle with a focus on trophy hunting in 1947; it encouraged annual publication of hunting trophy records (Tchakossa 2012). Hunting was further encouraged by fairs such as the one in Brazzaville in 1953, which specified which areas of the AEF were better for select species (Anon. 1953).

Colonial PAs were largely created for species protection, sport hunting, and science. All were made by decree without consultation with local communities, and often involved forced removal or appropriation of community lands. According to Tchakossa (2012), PAs and reserves were under-resourced, often

underestimated the home ranges of the animals they claimed to protect, were hard to attain, and with poorly defined reasons for conservation.

Beyond the creation of protected areas in the AEF, a second policy related to labour paved the way for the creation of PAs later: "regroupement" policy (forced resettlement); through colonial territorialisation, communities were forced to abandon their common lands and to move to roadsides with the argument that health, education, taxes, and labour were more efficient if connected by roads. Access to labour, such as to build the Congo-Ocean Railroad (Pourtier 1989a), or to impose taxes (Oligui 2007) were common reasons.

Regroupement contributed to emptying the youth from the countryside in Congo (Vansina 1973). In many cases it involved forced relocation and often did not result in the desired effect of a more effective government (Burnham 1975). Regroupement policy began in Gabon in 1910 around Libreville (Coquery-Vidrovitch 1972) and was continually enacted throughout Gabon in the colonial and post-colonial periods (Aubame 1947; Sautter 1966; Wunder 2003), including being implemented as late as the 1960s in the Haut Ogooué province (Walters 2010). In Gabon, 4,111 villages were reduced to 770 (Pourtier 1989b), leaving many places to appear "vacant" (Walters et al. 2019), despite continuing to be governed as common lands used for hunting, gathering, and cultural practices. This policy created vast stretches of "empty land" which could be attributed to other purposes, such as concessions and PAs. The creation of Gabon's PAs in 2003 did not displace people to create them (Curran et al. 2009) as this wasn't necessary since this had already happened during earlier regroupement (forced resettlement). In contrast, the establishment of the Yangambi Floristic Reserve was associated with in-migration of labourers to the area given the initial interest in developing commercial agricultural plantations at the site (Figure 3.2). The establishment of the Lomami NP in DRC in 2016 involved an extensive period of consultation with seven different ethno-linguistic groups mandated by a range of stakeholders (Hart, J., pers. comm., 26 September 2022).

## 3.3 Methods

Archival work by GW was conducted in France's Archives d'Outre-Mer (AOM), Aix-en-Province in July 2021 and at the Archives Nationales du Gabon, Libreville in October 2021. The library of AOM was also consulted, as well as online bibliographic sources, which are cited throughout this chapter. Archival work by DAW was conducted from 2015 to 2017 as part of the supervision of a doctoral candidate at the University of Kisangani, sponsored by the European Commissionfinanced Forests and Climate Change in the Congo (FCCC) project. Archival research was primarily carried out at the INERA library, Yangambi, the National Archives in Brussels and the Musée Royal de l'Afrique Centrale (MRAC) in Turvuren, Belgium as well as the CIRAD libraries in Montpellier.

Fieldwork by GW was conducted in the Ndendé and Mont Fouari area in January 2018 and in the Plateaux Batéké area between 2006, 2008 and 2022. Interviews were conducted with key informants from villages near the proposed and



*Figure 3.2* Early plantations in Yangambi on contested lands (31 December 1913) Source: National Archives of Belgium [Brussels], Archives INEAC (Inv. I 546)

actual PAs about the impact of regroupement policy, the creation of a PA and the cultural meaning of the area. Fieldwork by DAW was conducted by the doctoral candidate in more than 20 villages and settlements inside and bordering the Yangambi Floristic Reserve during the period 2015–2017. The case of Lomani NP was created from secondary source materials, and interviews with two former Wildlife Conservation Society (WCS) staff who coordinated the process which led to its creation and joint management by the Frankfurt Zoological Society and the Institut Congolais pour la Conservation de la Nature (ICCN) with effect from 2020.

## 3.4 Case studies

#### Democratic Republic of Congo

The Democratic Republic of Congo (DRC), now regarded globally as one of 18 "mega-biodiversity" countries, boasts 55 national PAs including nine National Parks, one Reserve de Faune, 25 Hunting Domains, 12 international PAs including three UNESCO Man and the Biosphere Reserves (Doumenge et al. 2021: 61). The two DRC case studies presented below – Yangambi Floristic Reserve (YFR) and the recently created Lomami National Park (LNP) – illustrate a variety of transformations, adaptations and contestations associated with the establishment of PAs by the Belgian Congo and the Democratic Republic of Congo. They illustrate in the first case, over 80 years of efforts to territorialise Turumbu lands – in the absence of any compensation – during the colonial and post-colonial periods and a recent donorfunded initiative to resurrect YFR as a "landscape laboratory". The second case provides insights into recent attempts over the past decade to territorialise lands, which became provincial PAs before being recognised as a National Park in 2016.

## Reserve Floristique de Yangambi (DRC): the forgotten reserve?

The Yangambi Floristic Reserve (YFR) was established in 1939. In contrast to other PAs managed initially by the Institute of National Parks of the Belgian Congo, the creation of YFR was inextricably linked to earlier agricultural research initiatives (Figure 3.2). In the late 19th century, Emile Laurent of the Gembloux Agronomy Institute in Belgium, under orders from King Leopold II, developed a project for the "rational organisation of agriculture" in the (then) Congo Free State. The appropriation of customary lands to establish the first palm oil and rubber plantations started in Yangambi and Ngazi along the banks of the Congo River occurred in ca. 1910 by the new civil administration of Belgian Congo. An initial focus on developing commercial (export) crops (1910–1933) was reinforced, after 1917, by Edmond Lepae of the University of Louvain, Belgium who introduced "a regime of obligatory cultivation" by the colony's subjects.

After 1936, the plantations established by the Yangambi Research Centre were briefly managed by the Regie des Plantations de la Colonie, and later by INEAC (National Institute for the Agronomic Study of the Belgian Congo) established in 1933, the same year that a royal arrêté established the administrative organisation of the colony. It also represented a radical shift in the agricultural policy first introduced by Leopold II. The creation of INEAC was nevertheless, still motivated by the expansion of (commercial) agriculture based on better science and the territorial appropriation of more customary land. Legislation adopted in 1934 to provide compensation for the appropriation by the colonial state of customary lands was not respected or implemented in Yangambi (Kyale-Koy et al. 2019c). Early concerns were raised about indigenous agriculture practices as a prerequisite to protect and conserve forests suggesting early colonial interest in a "landscape approach" (Tondeur 1937). The INEAC was dissolved on 31 December 1962.

#### Management and use of the YFR after independence

After independence, INERA (National Agricultural Study and Research Institute) which replaced the INEAC, did not undertake any further acquisition of customary lands. Compensation claims by the Turumbu community on the southern edge of the YFR started in the 1960s. Social memories of the appropriation of customary lands by INEAC have continued to inform local claims for compensation, notably after land conflicts re-emerged between Yelongo and Weko in 2012 (Kyale-Koy et al. 2019b). These claims remain largely unsettled to the present day.

The "Bakajika" law adopted in 1973 resulted in the re-appropriation of all land by the Zairean State. Postcolonial agricultural development policies during the 1970s and 1980s were largely a failure. Canadian private sector interests inventoried parts of YFR in the mid-1970s with the aim of converting part of the YRF into a forest concession due to the rich stands of afromosia (Pericopsis elata), the first tropical timber species to be listed in Annex II of the Convention on International Trade in Endangered Species (CITES). This effort was thwarted by parallel initiatives which led to (then) Zaire signing up to CITES and recognising YFR as a UNESCO Man and the Biosphere reserve in 1977. As others have noted, in practice this new status remained "merely a further title without concrete management consequences" (Gissibil et al. 2012: 22). The country faced turmoil during two civil wars during the period 1996–2003 during which time retreating military forces plundered much of the remaining wildlife in YRF. Fiscal, legislative, and institutional reforms in the forest sector were initiated in 2002 with support from the World Bank Group but did not result in any change in the status or limited management of YRF.

From its creation, YFR has been continuously "managed" by a precariously funded national research institute and not by the Congolese Institute for the Conservation of Nature (ICCN), which manages all other PAs in DRC. YFR was not formally recognised as a PA until after 2014 and, to the present day, does not benefit from any support (staff, budgets or materials) from ICCN. Small-scale NGO-led initiatives to support the protection of YFR have included projects with WWF, IUCN and Austrian Aid during the 1990s and 2000s, focusing on mapping exercises and equipping "eco-guards". YFR covers 224.410 hectares and with periodic project funding, this been managed by 75 eco-guards with each surveying and protecting more than 3,000 hectares on foot. The inability of INERA to

effectively manage YFR has resulted in the progressive degradation of the reserve due to new human settlements, illegal mining camps, and the continued exploitation of the forest and wildlife resources by local communities to sustain their livelihoods (Kyale Koy et al. 2019a and Kyale Koy et al. 2019b).

#### The resurrection of Yangambi Floristic Reserve?

A recent European Commission-financed project, building on earlier support for capacity building of the University of Kisangani, may help to resurrect YFR through investments to do the following: 1) preserve and modernise the YFR (colonial) herbarium in collaboration with the Meise Botanic Garden in Belgium; 2) create a new wood technology laboratory linked to the Royal Museum of Central Africa (MRAC) in Teuveuren, Belgium; 3) build a carbon flux tower to measure CO2 emissions from the canopy of DRC's moist tropical forests in partnership with the University of Gembloux, Belgium; and 4) create a CIFOR-led rural development "laboratory" to develop plantations of fast-growing species to provide biomass for electricity generation as part of a new "landscape-based approach to sustainable development". In many cases, the same Belgian institutions which were involved in colonial agricultural development policies are today engaged in these novel scientific ventures. The critical issues of how to sustainably finance INERA or the costly new scientific experiments and how to improve the management of YFR have not yet been addressed.

#### Modern conservation – Lomami National Park: A new wonder of the DRC?

Lomami National Park (LNP) was officially established in 2016, the first national park created since 1970 and only the eighth with this designation in the DRC (Lomami National Park, 2020). It straddles Tshopo and Maniema Provinces and was established largely through the efforts of John and Terese Hart, former Wildlife Conservation Society staff, and with substantial US funding. It covers an area of almost 9,000 km2 and is at the heart of a 40,000 km2 natural landscape. LNP is estimated to have more Congo endemic species than any other PA in the country. The land bordering LNP serves as an important 35,000 km2 buffer zone for the PA.

The Lomami landscape was explored in 1883 by a Scottish Baptist Missionary, George Grenfell and his West Indian wife, Rose Patience Edgerley, who travelled up the Lomami River to 1o 33' (within the current Lomami NP), before turning back. Grenfell noted that, "The course of the Lomami was very torturous, and its current very strong" (Grenfell 1886). Commercial hunting started early in ca. 1890 and during the Etat Independent du Congo, control of the Lomami ivory trade went from Swahili Arabs and the Zanzibar caravan routes to Leopold II's agents and the Congo River trade. During the colonial era, the landscape was largely ignored despite several attempts to build a road to the Congo River. Official maps up to the 1970s continued to show an erroneous course for the Lomami River (Hart 2022). The lack of interest reflected low soil fertility, poor productivity and harsh conditions during the rainy season as well as the fact that the Yangambi Research Centre remained the "jewel in the crown" for the Belgian Congo.

Jacques Verschuren worked as a biologist in Zaire's national parks after 1948 and became Director General of the (then) Zairois Institut National pour la Conservation de la Nature (INCN) between 1969 and 1974. He identified the "immense, almost unexplored forest that stretches between the Lualaba and Lomami Rivers" (Verschuren 1975: 28), and acknowledged that "traditional hunting by local populations has no serious effects; it has always existed and can even be encouraged, so long as only "authentic" weapons are used – bows, arrows, pygmy nets" (Verschuren 1975: 32). Verschuren considered poaching raids from neighbouring countries, the lack of an effective Wildlife Department and the world ivory trade as the greatest threats to the landscape at the time (Verschuren 1975: 32–33).

After more than 30 years, another exploratory phase (2007–2009), identified three rivers – Tshuapa, Lomami and Lualaba – in the Lomami landscape and led to the adoption of the TL2 name. This exploration confirmed the known range of the bonobo (Pan paniscus), Congo's endemic great ape, further to the southeast. The TL2 project also found the okapi (Okapia johnstoni), DRC's endemic forest giraffe, forest elephants (Loxodonta cyclotis), and the Congo peacock (Afropavo congensis). Both a new species, the Lesula monkey (Cercopithecus lomamiensis) and an extremely rare monkey (Cercopithecus dryas) were also found in LNP and its buffer zone.

In stark contrast to the establishment of NPs in the colonial period, a subsequent phase (2010-2013) involved extensive consultation with seven ethnic groups (Mbole, Lengola, Mituku, Langa, Ngengele, Arabisées, and Tetela) who were all involved in the founding process of the national park together with ICCN. Continuous outreach and collaboration with local chiefs involved town baraza meetings and traditional tambiko ceremonies (Hart 2011). This first led to community agreements for a park and eventually to an accord on the park limits. The Lukuru team also worked with the Congolese Army, the Wildcat Foundation and FARDC to address elephant poaching and improve security in and around LNP. Initially both Maniema Province in 2010 and Tshopo Province, in 2013, had created two provincial parks to protect the area until national park status was granted. The Lukuru team had to provide surveillance in the park and alternatives for hunters coming from outside the park. ICCN organised the first guard training in the LNP in 2015 with funds coming through the Lukuru Foundation. ICCN selected almost all of the park guards from the surrounding communities. These guards are now dispersed in the seven operational surveillance camps established over the years on the park border or (one) within the park. In the DRC, new community forestry legislation also provides a way that communities can work with ICCN to gain greater control over the use and management of their forest resources if they can demonstrate changes that lead to long-term forest sustainability and hunting viability. However, doubts have been expressed on the viability of the community forestry model in the DRC (Lescuyer et al. 2021).

Fundraising efforts primarily in the US during 2014–2015 helped to secure more than US\$ two million prior to a joint letter from the governors of Tshopo and Maniema Provinces which led to the formal recognition of LNP in April 2016. In April 2019 LNP officially became the focus of a Frankfurt Zoological Society (FZS) project. In January 2021, LNP, FZS, and ICCN signed a ten-year agreement to co-manage LNP. A similar model of public-private-partnerships has been used in the management of other national parks in DRC including Virunga, Garamba, the Faunal Reserve of Okapi, and Salonga. A critical issue remains the long-term financing of the LNP (Hart, J., pers. comm., 26 September 2022).

Hunting of species not protected by national law and during open hunting season is authorised by Maniema Province regulations in the buffer zone of the Lomami National Park. Since 2017, vouchers record numbers and species of authorised bushmeat, as well as shotgun ammunition and snare cable transported across the LNP on established tracks. The voucher system has high rates of compliance. Vouchers provide proof to park rangers checking caravans that bushmeat is not illegally harvested, and ammunition and snare cable are not illegally deployed in LNP. Insecurity in the area in 2019 led the Congolese military to limit shotgun ammunition in transporters' loads. This was associated with a decline in numbers of primates in bushmeat loads. Increasing costs and risks of bushmeat transport versus increasing availability and decreasing cost of domestic meat in Kindu have progressively reduced the economic value of bushmeat trade from the LNP buffer zone (Hart et al. 2021).

## Gabon

In 2003, Gabon's president simultaneously created 13 national parks (Quammen 2003). Since then, the protected area system has been expanded to include marine areas and it is currently undergoing another expansion to meet the projected 2030 CBD targets. The two Gabon case studies presented below – the Ndendé-Mont Fouari Complex and the Parc National des Plateaux Batéké (PNPB) illustrate, in the first case, over 65 years, how colonial-era hunting reserves which excluded local hunting were degazetted in the 1980s, are being revived as a potential PA today. The second case (PNPB) provides insights into repeated attempts over more than 130 years in the pre-colonial, colonial, and postcolonial eras to territorialise Batéké lands, part of which became a PA in 2003.

The Ndendé-Mont Fouari complex (Gabon-Republic of Congo): the resurrected reserve?

#### HISTORY AND CONTEXT OF CREATION 1920S-1980S

The Complex of Ndendé-Mont Fouari is a series of reserves and parks straddling the border of present-day Gabon and Republic of Congo. A forest-savanna mosaic, its savannas are ancient grasslands dating to at least 6,000 years BP (Schwartz & Lanfranchi 1991). The area is largely inhabited by the Pounou ethnic group, which until the recent past, collectively managed their lands (Deschamps 1962) and are inscribed with many meanings. According to an interview with a resident of Nzinga village in 2018, Mont Fouari is sacred, including places inhabited by spirits, and areas revered for their special properties, such a Dimatobé.

During the colonial era, villages were regrouped numerous times between the 1920s and 1930s (Gray 2002: 178). A map from 1928, published in relation to botanical surveys for the Flore de Mayombe (Pellegrin 1928), shows that villages were still scattered throughout the area (Mariol 1928). Village placement in the Ndendé area was typically situated at the limit of lands managed by local chiefs (Balandier & Pauvert 1952). An interview with the Chief of Nzinga village (Gabon) in 2018, near Mont Fouari, indicates that the regroupement policy that he experienced passed without problems. Another interview with the Chef de Regroupement and two widows shows that the regroupement process occurred again in the early 1960s by a solider named Antoine Ivembi Pama, which united the Pounou of the forest and the Pounou of the savanna together along the road.

The area was also prized for wildlife: a 1928 map listed animals found in the Ndendé area including elephants, buffalo, sitatunga, waterbuck, reedbuck, yellowbacked duiker, and leopards (Mariol 1928 cited in Spinage 1980). The area was the subject of botanical surveys starting in 1924–1938 (Pellegrin & Le Testu 1938) and then in the 1950s (Koechlin 1961). In 1955, a series of six hunting domains and wildlife reserves were created between Ndendé Gabon and Mouyombi Congo, each with different hunting restrictions and sometimes displacement Gouverneur de France d'Outre-Mer 1955 (Table 3.1).

Protected area	Impact on village displacement, local subsistence, and cultural practices
Réserve de Faune du Mont Fouari	Displacement of the village of Fouari and Dounzaza II Camp. Hunting was completely forbidden in the area, including all other forms of use except the gathering of bamboo and palm tree products.
Réserve de Faune de la Nyanga Nord	Forbade all hunting but permitted most other usages (agriculture and gathering). An exception was made for the village of M'Békila whereby some hunting was permitted with mid-sized, locally made arms within 5km of the village.
Réserve de Faune du Mont Mavoumbou and the Réserve de Faune de la Nyanga Sud	Some hunting rights for permit holders. Specifically, Africans residing inside or on the border of the Reserve were permit- ting hunting through the use of guns acquired through trade.
Réserve de Faune de Ndendé	Resident Africans in the villages on the perimeter or inside the reserve were forbidden all hunting rights (Mercier 1955).
Domaine de Chasse de Ndendé	Created to favour sport hunting and specifically those hunters (resident and non-resident) who had a permit for the grande chasse.

Table 3.1 Summary of the protected areas created in 1955, with notes on the various impacts on village displacement, hunting, and subsistence.

Borders between Moyen-Congo (present-day Gabon and Republic of Congo) were modified in 1941 (Eboue 1941; Sice 1941); however, the border was never described in detail and remains disputed; and in 2014 a commission was established to resolve the issue. After independence from France in 1960, a series of decrees dating from November 1962 changed and completed the Gabon PA network, which included the Lopé-Okanda National Park, reserves in the Wonga Wongué Area, and established others (Brugière 1999). Each PA gained the status of a "rational fauna exploitation area (AERF)" (Brugière 1999). By the late 1980s, the Ndendé Hunting Reserve and the related complex were degazetted by Gabonese Authorities, and from 1987 were no longer part of Gabonese national maps (Wilks 1990).

Early in their creation, the designations of rights clearly prioritised sport hunting, which, as noted in the introduction, was a key focus of European tourism in the colonies. We have a hint of what this meant for Mont Fouari, when in 1990, it was noted that although the Reserve du Mont Fouari formerly had an important tourism industry, this was no longer the case (Hecketsweiler 1990).

### Modern conservation 1990s-2022

In 1990, a proposal published by IUCN for 15 new PAs emerged in Gabon (Wilks 1990), many of which underpinned the 2003 creation of Gabon's PAs. None of these cover the Ndendé-Mont Fouari area. On the Republic of Congo side of the border, a similar IUCN proposal calls to unite the existing four areas into a single PA under the name of Mont Fouari (Hecketsweiler 1990). Hecketsweiler noted that there had never been a systematic biological inventory of the area. The area, although observed to be sparsely populated, was still considered to be under threat from local agriculture and urban elite hunting. In a summary of the conservation of tropical forests, the chapter on Congo while mentioning the Mont Fouari and related reserves, does not mention any active conservation work occurring in that area (N'Sosso & Hecketsweiler 1992). From this period, there is little work focused on conservation, almost extending to a disregard for the area in Gabon.

In 2003, a proposal to make a cross-border PA emerges (Doumenge et al. 2003). In the last five years, steps have been made to make that happen. First, with the rapid expansion of oil palm in Gabon, Olam, an agricultural enterprise with which Gabon established a public-private partnership and created a series of oil palm plantations in the Mouila-Ndendé area (Burton et al. 2017). The state seeks to collaborate with the company to contribute to paying for the new PA to offset their environmental footprint from their oil palm plantations in the nearby savanna. Currently, through the CAFI project, four cross-border PAs are proposed, including in the Mont Fouari area, citing that a peace park can help resolve contested border issues, protect rare species and habitats that have recently been observed in the area, and complete biodiversity elements missing in the current Gabonese PA network. The proposed park comprises 82,500 ha, and for which a community consultation is planned; in the same map, a new PA is also proposed around Ndendé (Anon. 2019).

Parc National des Plateaux Batéké: a postcolonial park with a colonial territorialisation history

#### PRE-COLONIAL TERRITORIALISATION 1880S-1960S

For the Batéké, the reorganisation of their territory began with Pierre Savorgnan de Brazza's voyages where he became an "inventor of space" (see Gray 2002: 104; Pourtier 1989a: 83), with his exploration, mapping, and treaties opening their and other's territories to French colonisation (de Brazza 1887, 1888). As he walked across the Plateaux Batéké, he realised that his operations in Batéké territory would only be successful if authorised by the land chief, and not the village chiefs (Guiral 1889: 342). He carefully delimited the extent of the Batéké kingdom (Brunschwig 1972: 52) with one map noting numerous domains (ntse), each with a chief (Pobeguin 1888) Figure 3.3. These domains refer to the territory over which the land chief, or ngantse, presided. The land chief was the person in charge of a particular domain, responsible for the productivity of the land (Ebouli 2001). The Plateaux Batéké territory began to disintegrate with de Brazza's negotiation with the Makoko, the Batéké Supreme Land Chief, who ceded their trading rights to the Congo River's Stanley Pool in 1880 (de Brazza 1880).

After this first act of colonial territorialisation, the Batéké area was also subject to colonial concessions and forced labour for rubber collection (Coquery-Vidrovitch 1972). It soon became an administrative backwater between Libreville and Brazzaville. The borders changed in 1903 and 1925. And in 1956, a hunting zone was declared nearby in Zanaga (Anon. 1956).

A critical act in territorialisation was regroupement policy, which was enforced in the area 1955–1967. Prior to regroupement, villages would voluntarily relocate every six to seven years, creating village forests, a visible testimony to historic settlement and migration patterns (Guillot 1980). These movements drastically changed when the new Gabonese government enacted regroupement. Since then, most villages in this area remained fixed in their 1967 location.

In the 1950s many of the smaller villages apparent on aerial photos were still scattered in the savanna (Institut Géographique National 1954), including in the present-day PNPB as is the case of Kewaga village, visible near the park's present-day Camp Ntsa. The regroupement of the 1960s realigned villages along roads, reorganising societal space. This left large areas to appear as "uninhabited". In the study area, regroupement disconnected people from their lands and disrupted their natural resource governance; it stopped the creation of new village forests, and it coincided with the last organised hunting fires (Walters et al. 2014; Walters 2015).

In the study site, many of the villages that were once along the Mpassa River corridor (Deschamps 1962: 61) were then regrouped along the forest road to Boumango. Other Batéké groups remained in the savannas. Regroupement was proposed at least twice for the area, with some villages initially moving to the first proposed road site but refusing to move a second time when the road site changed; these groups remain on the still unpaved road to the PNPB. Those that accepted the



*Figure 3.3* A portion of Pobeguin's 1888 map of Batéké territory and its chiefs. The noting of land chiefs and their territories creates a foundation for negotiating away Batéké land rights. Source: FR ANOM. Aix-en-Provence (# AF 563) – all rights reserved

proposal for the second regroupement moved into the semi-forested Bongoville area along a road and became strangers in a new forest ecosystem.

Some groups who were regrouped still lay claim to their domains. Kanini's village Mboua was formerly located in PNPB but had been regrouped 40 kilometres to the west in the forested zone near Boumango. Kanini had disputed park jurisdiction over this ancestral area. Likewise, just across the border in the Republic of Congo, hunters in the Lékana area lay claim to ancestral hunting rights in the eastern part of the park (Gami 2003). They continue to hunt there, despite efforts to stop poaching within the park. In 2005 and in the past few years, members of Kessala village also lay claim to the eastern part of the park, notably Lake Loulou, a sacred area. The Batéké around PNPB speak about this landscape's history by citing names of villages, old trails, weekly markets, hunting savannas, and places where liana bridges once crossed the Mpassa. Even if today there are no villages in PNPB, the Batéké still remember what it was like to live there and it remains an important part of some groups' ancestral territory.

#### The creation of PNPB and current conservation measures: 2003-present

Based on rapid biological surveys throughout the country, Gabon's then president, Omar Bongo Ondimba, established 13 national parks, including the PNPB. Three reasons are given for park establishment in the 2008 management (ANPN 2008): unique habitats, mammal and bird species, and the possibility of lions. No villages were present in the park at the time of its creation. The plan recognises Batéké cultural heritage, noting that people should be considered as part of nature and should be implicated in the management of the park.

The presence of community forests is noted in the buffer zone; but, the plan notes, according to Article 14 of the Loi 03/07, these cannot exist within the park. And furthermore, customary hunting and fishing rights are forbidden, and former village sites within the park are not allowed to be reoccupied. Sport fishing is permitted, and scientific research is encouraged. In the buffer zone, co-management is proposed through the establishment of a Comité Consultatif de Gestion Locale (CCGL). This body was created but is not functional (ANPN & Panthera 2018; pers. obs. 2022), something which is reported from other PAs in Gabon (Franks & Small 2016; Pyhälä et al. 2016; Bifane Ekomi 2022).

Thanks to the encouragement of scientific work in the park, the area is now known for western lowland gorillas (Le Flohic et al. 2015), cuckoo migration (Hewson et al. 2016), the reintroduction of lions (Henschel 2006; Barnett et al. 2018), as well as a diverse flora (Walters et al. 2022) and cultural fire usage (Walters 2012).

This landscape received external support from several conservation partners including the Aspinall Foundation for gorilla reintroduction, and Panthera for lion reintroduction. The Wildlife Conservation Society was active from 2003 to 2012. During that time, they zoned community areas around the park. Although these exercises were in consultation with the Batéké villages, and although they acknowledged cultural land management, this exercise in territorialisation largely

failed to engage with the Batéké land chief system (Walters et al. 2021). WCS ceased activities in 2012 after the large USAID program, Central African Regional Program for the Environment (CARPE) withdrew. Currently, the main conservation organisations in the area are PPG and Panthera.

Currently the park is proposed to be expanded by approximately 70,000 ha, and in partnership with the Republic of Congo who are also planning a PA (Anon. 2019). The justification for the expansion is to protect rare habitats and to foreclose agro-industrial expansion. The PA expansion is further supported by the Rainforest Trust. Community consultation is in progress to define the boundaries of the expanded area. While one community has already resisted the expansion, this is not yet the case for the others. In 2022, results from fieldwork, clearly show that the historical legacy of previous land loss by Batéké people continues to be associated with the park expansion today.

### 3.5 Discussion

# What are the consequences of colonial and postcolonial territorialisation on people and conservation?

A key consequence of colonial and post-colonial territorialisation has been the upending of social and institutional order (Alvarado 2019) in conservation frontiers. As conservation areas edge into people's territories, they conflict with customary institutions. In the cases of PNPB and YFR, communities witnessed the appropriation of customary access rights and lands for conservation and "science". Territorialisation reduced access to community lands and natural resources such as forests, wildlife, and fisheries. This often occurred in the absence of any compensation even when colonial legislative instruments were introduced as early as 1934 in the Belgian Congo. Local communities in, for example, Turumbu on the southern boundary of YFR continue to contest their right to compensation of YFR (Kyale-Koy et al. 2019a). Around the PNPB, Batéké groups from both Gabon and Republic of Congo have contested their loss of land, but without governmental mechanisms through which to make formal claims.

In cases of regroupement policy, local people frequently gave up their rights for the promise of basic development (e.g. education, health, clean water supplies etc.) which has only come, if at all, very slowly while also costing them their resilience (Haller 2019). In the case of Mount Fouari, local hunting norms and practices were forbidden and replaced by conservation through legally gazetted protected areas. Whether for hunting or tourism/animal viewing, conservation remains a luxury for a global travelling elite, and largely inaccessible and unknown to residents. Although the progenitor of the "new wave" of PAs differs from its colonial antecedent, it is still distinguished by being largely externally driven, and externally financed. The concessionary model continues today in Gabon, with land tenure centralised and 53 per cent of its territory being allocated in forestry or agricultural concessions (Legault & Cochrane 2021).

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Almost all of the PAs in present-day Gabon and DRC were created with limited consultation with riparian communities. This contrasts with the use of Reserve Settlement Commissions in India and, for example, Ghana which used secondary legislation to identify rights of access to and use of land and resources prior to the gazetting of forest reserves (Wardell and Lund 2006a). It is reassuring to note that the recent establishment of Lomami NP in DRC involved an exhaustive process of consultation with local communities (see above) and that the expansion of Gabon's parks have begun community consultation. However, given the historical dispossession, consultation under this legacy will be challenging.

The Government of Gabon is now formalising their land use planning with a national strategy for development (République Gabonaise 2011), with the previous policy dating from the colonial era (Ovono Edzang 2019). The Plan National d'Affectation des Terres includes consultation with local communities (République Gabonaise 2015). Ovono Edzang (2019) reported that rural populations, including fishing and forest communities with customary usage, are the most precarious, and lack legal title to land. Gabon is currently mapping their villages and surrounding community forests in an effort to finalise their territorial planning. The 2030 PA targets are part of this process.

The laws in both countries, nevertheless, continue to favour a "policing approach" to PA management by adopting a battery of prohibitions and restrictions on human activities (a continuation of "fortress conservation", Brockington 2002) with reference to other sectoral texts such as the Code Forestier in the DRC. To sustain livelihoods, poor rural communities have little choice but to continue to negotiate local rights of access to PAs "in the margins of the law" (Wardell and Lund 2006b). Given these results, we question the territorial imperative to create new PAs particularly when existing PAs have had in some cases devastating impacts on communities, provided little development, and at best limited engagement.

# What can be learned from the history of colonial-era PA territorialisation when we think about the new 2030 goals?

Colonial-era conservation has resulted in a "hierarchy" of PAs in both countries with National Parks at the pinnacle – usually distinguished by either iconic (sometimes endemic) species (gorillas, okapi, Congo peacock etc.), leading to some PAs being recognised and others forgotten (IUCN 2020). National authorities mandated to manage PAs such as the Institut Congolais pour la Conservation de la Nature (ICCN) and the Agence National des Parcs Nationaux in Gabon are centralised, and often poorly staffed and budgeted. In the DRC, ICCN has established 10-year co-management contracts with international NGOs, notably for PAs with endemic or iconic species. This has reinforced the hierarchy in terms of the allocation of staff and funding predominantly to four PAs in the country supported by wealthy communities in the US and Europe.<sup>3</sup> This pattern is being repeated by the Lomami NP. In Gabon, a variant of the colonial concessionary model continues to the present day in terms of favouring conservation maintained

through public-private-partnerships established with foreign organisations, e.g. Grand Mayumba, Olam (Legault & Cochrane, 2021), and largely funded from external sources. Little consideration is given to exit strategies by international NGOs currently managing PAs, and how these PAs will be sustainably financed in the long term through national budgets. This echoes earlier concerns raised about the precarious funding of conservation and PAs (see Wilkie et al. 2001 and Lindsey 2018).

Genese Sodikoff in her book Forest and Labor in Madagascar: From Colonial Concession to Global Biosphere (2012) examines the role of low-wage labour in biodiversity conservation, the conservation agents who do the "heavy lifting" of biodiversity protection. Besides building and maintaining park infrastructure, portaging, directing tourists, and monitoring PAs, local conservation staff are expected to spread Western conservation ideology and educate members of their own communities. Low pay and uncertain working conditions mean they often must continue with the forest clearing and wildlife hunting practices that their employers find so problematic. This is just one of several persistent contradictions in environmental management in many parts of sub-Saharan Africa. Despite the importance of these workers, they have often been rendered invisible by the heroic view of conservation (Garland 2008), where the intellectual work of scientists and conservationists is privileged over the day-to-day practices on the ground and the challenges faced by poor rural communities. This has been reinforced in countries such as DRC where the management of National Parks has been sub-contracted through public-private-partnerships and is still in evidence on the Lomami NP website. It is no longer the days of Roosevelt and son (whose safari had more than 250 porters!), but how will these sparse and poorly paid jobs help such rural communities move out of poverty?

When thinking about how Central Africa (or any country) can expand its PA system to meet the 2030 CBD targets; new, inclusive models of conservation must be considered. There are some glimmers of hope in terms of the multiple efforts, often associated with decentralisation processes, to delegate authority for the management of natural resources to Indigenous Peoples and local communities, and to develop alternative approaches. Several ways to recognise community contributions to conservation exist. First, category V or VI PAs recognise cultural landscapes and sustainable-use zones (Dudley 2008), such as a formalised hunting territory (Cornelis et al. 2017). Since 2010, the CBD recognises "Other Effective Area-based Conservation Measures", OECMs (Dudley et al. 2018; Gurney et al. 2021) which favour the recognition of community areas (and other land types) which contribute to conservation, and which do so in a just way (Jonas et al. 2017). States could also foster bottom-up processes which permit communities to self-recognise their communal lands that contribute to conservation through Indigenous and Community Conserved Areas or Territories of Life (ICCA Consortium 2021). And Gabon could recognise communities which call for community protected areas to be created on their ancestral lands to halt logging (Evine-Binet 2022). PA creation and expansion should never come at a cost of community land and rights loss (Tauli-Corpuz et al. 2020).

The DRC adopted a legislative instrument for Community Forestry Concessions in 2014 and is testing this model in different parts of the country (Moise 2019).<sup>4</sup> Concerns have been raised about the socioeconomic viability of such models (Lescuyer et al. 2019). Furthermore, reform of the 1973 land tenure law is still pending. In Gabon, since 2001, Gabon's Code Forestier permits community forests and since 2007, all of Gabon's parks should have co-managed buffer zones. In Namibia, community conservancies have been successfully developed by local communities to manage wildlife (Weaver & Petersen 2008) after the earlier not-so-successful WINDFALL and CAMP-FIRE initiatives in Zimbabwe (Milupi et al. 2017; Ntuli et al. 2020).

## 3.6 Conclusions

The critical and frequently overlooked importance of the historical context of PAs show that these territorial interventions were often associated with European colonial rule in sub-Saharan Africa (and other parts of the world). The establishment of PAs as an integral part of the part of the "empire forestry mix" often led to the appropriation of customary lands and restricted access to natural resources (sensu Haller 2019); they are not simply post-IUCN's World Conservation Strategy in 1980, or in response to postcolonial conservation policies. Historical perspectives, as our case studies have shown, help us to understand the social and political relationships associated with PAs, and in identifying contemporary coping strategies and adaptation to environmental stress.

Historical records in sub-Saharan Africa, however, are often fragmentary. Even where longer historical time series can be assembled, the selection of appropriate reference conditions may be complicated by our limited knowledge of the past influence of humans, and by non-equilibrium dynamics. These complications do not lessen, however, the value of history. The reconstruction of PA histories which recognise hierarchical scales of analysis in both time and space can highlight the complexity of specific local geographical and historical settings, and provide a basis to redefine baseline ecological conditions, to reinterpret the impact of demographic growth or, as one scholar has suggested to "... systematically build in perspectives from political economy as well as ecology ..." (Beinart 1996).

Some scholars have highlighted the frequent failure to recognise that colonial systems varied according to what Europeans actually found in Africa and that

... the developments in each colonial territory had their unique quality dependent upon the particular policies of the colony and the recognition it gave to African interests. Policies varied between colonies, even between those belonging to the same imperial power. They reflected the resources available for exploitation, the power of Europeans settled in the colony and the degree to which Africans were able to influence decisions.

(Colson 1971)

Our cases show this variation, not only between countries, but also within.

Local encounters with colonial (and post-colonial) conservation have been extremely varied in terms of the processes of establishment, the organisations mandated to manage the PAs, post-colonial objectives of management and if, and how the PAs have been funded. Africans experienced colonialism through the societies in which they lived. The exigencies of colonial rule often included the systematic extraction of male labour, the alienation of customary lands and efforts to incorporate local production systems in the global economy. Regroupement is an example of a colonial policy that was not about conservation but labour, which leaves its imprint on the people today, limiting access to their customary territories, reducing livelihood opportunities and negatively impacting their view of conservation. These labour demands followed in the wake of the last slave raids, periodic disease epidemics, and severe droughts and famine each leaving their imprint on societies and the ecosystems in which they lived (Walters et al. 2019; Hymas et al. 2021). Change, adaptation, mobility and conflict were already endemic characteristics of African societies before empire. The encounter with colonial forest conservation merely intensified these features, at the same time as it created new opportunities for Africans (Bernault 2019). It resulted in what Sara Berry describes as "an era of intensified contestation over custom, power, and property" (Berry 1993). The social memories of these often-negative experiences are frequently recalled in African societies which thrive based on oral histories rather than written records (Vansina 1985; Hawkins 2002).

The results of this chapter can also inform those projects which are also exercises of territorialisation in conservation frontiers. PA expansion projects need to consider at what cost and for whom will expansion occur. Do proposed PAs continue a legacy of colonial dispossession or do they inspire new collaborations with communities to conserve nature, together, in a diversity of ways? Ultimately, what legacy of community empowerment or dispossession will this current wave of PA expansion make on Central African communities?

## Notes

- 1 This was only acknowledged by the World Conservation Monitoring Centre in their Annual Report on PAs: A Review of Global Conservation Progress in 2007.
- 2 This was amply illustrated by President Theodore Roosevelt and his son Kermet, who in 1909 conducted a year-long hunting safari in eastern Africa including present-day Garamba National Park in the Democratic Republic of Congo. The two men killed 512 animals including 17 lions, 11 elephants and 20 rhinoceros (Wardell 2020). Roosevelt propagated the "wilderness myth" in his best-selling book published a year later, and African hunters were labelled "poachers".
- 3 In 2012 an estimated 90 per cent of ICCN's costs were concentrated in four PAs: PNVirunga, PNGaramba, PNKahuzi-Biega, and the Reserve de Faune de Okapi to the detriment of all other protected areas. ICCN's personnel in 2012 was estimated to be 3,671, the majority of whom were deployed in the four PAs. ICCN's annual costs in 2011 were estimated to be US\$ 32,6m 85 per cent of which was funded through international partners (Wardell 2020b).

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4 Recent legislative reforms in the DRC which may assist in the development of devolved modes of governance by Indigenous Peoples and Local Communities include: Ministerial order CAB/MIN/AF.F.ET. / 259–2002 on the composition, organisation and functioning of the provincial forest advisory councils; Decree 14/018 of 2 August 2014 fixing the modalities for the attribution of concessions to local communities; and Law No. 15/015 on the status of customary chiefs, 25 August 2015 (inc. Articles 26, 35 and 36 to resolve land disputes).

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