Introduction

The African Pygmies of the Congo Basin are the largest and most diverse group of active hunter-gatherers that remain in the world. At least fifteen different ethnolinguistic groups exist in the Congo Basin, with a total population of 250,000 to 350,000 individuals (see figure 1.1 and table 1.1 in chapter 1 for names, locations, and populations of major ethnic groups). Because it has the largest group of hunter-gatherers in the world, research in this region can provide detailed and rich insights into the commonalities and diversity of a way of life that has characterized most of human history. Pygmies may be able to increase our understanding of the past, but they are modern humans facing the modern human problems of globalization and exploitation. This volume addresses regional and global hunter-gatherer research questions as well as the contemporary social issues confronting foragers in the Congo Basin.

This is the first text to provide a general overview of both the cultural and biological perspectives of African Pygmies. Existing monographs cover one or a few groups and are limited to specialized topics—Bahuchet (1985) focused on Aka ethnoecology, Bailey (1991) described Efé men's subsistence, Hewlett (1991) detailed Aka parenting, and Turnbull (1965) provided vivid descriptions of Mbuti social organization. Cavalli-Sforza (1986) edited the first contemporary book on several African Pygmy groups, but it was limited to biological topics such as genetics, health, and growth. *Hunter-Gatherers of the Congo Basin* is distinct in that it provides a comprehensive overview of current research on Congo Basin hunter-gatherers—from music, social organization, and childcare to health, genetics, and history.

This book is timely because knowledge and understanding of Congo Basin hunter-gatherers' ways of life have accumulated and increased dramatically since the 1970s. The volume has three cohorts of researchers: a senior cohort of Bahuchet, Hewlett, and Ichikawa, who started their research in the early 1970s; an intermediate cohort of Froment, Takeuchi, Moïse, Fürniss, and Sato, who began their research in the 1980s; and a young cohort of Lupo, Verdu, Rupp, and Lewis, who first conducted research in the 1990s. The authors have from at least ten to more than forty years of field experience in central Africa, have made repeated trips to the region, and have supervised several PhD dissertations on Congo Basin hunter-gatherers. Knowledge has increased substantially over the years, but it is widely dispersed in book chapters and journals in different languages. French, Japanese, American, and British researchers have conducted the majority of the research on Congo Basin hunter-gatherers in the last forty years, and each national research group has its own academic traditions, history, and publications. This volume assembles and summarizes the last forty years of research of prominent scholars from around the world.

Hunter-Gatherers of the Congo Basin addresses both topical and theoretical issues. Leading academic authorities provide overviews on the relatively characteristic features of Congo Basin hunter-gatherer life, such as their yodeled polyphonic music (chapters 1 and 7), egalitarianism (chapter 8), multiple child caregiving (chapter 9), and complex relations with neighboring farming groups (chapters 1, 3, 4, and 11). Other chapters address regional and global theoretical questions, such as, why are Pygmies short? (chapters 2 and 5); can tropical forest hunter-gatherers live without the carbohydrates they receive from neighboring farmers? (the "wild yam hypothesis" in chapters 3 and 6); and how do hunter-gatherer children learn to share so extensively? (chapter 9).

Finally, several chapters provide useful research for development agencies trying to understand and design policies to serve the "first peoples" of the Congo Basin. European and the US conservation groups have substantially increased the number of tropical forest parks and reserves in the Congo Basin, and this has led to displacement or dramatically impacted the lifeways of forest peoples. The "bushmeat trade" and transmission of "emerging" tropical rainforest infectious diseases, such as Ebola, are prominent issues in both conservation and public health agencies, and policies on both topics profoundly impact Congo Basin hunter-gatherers. Humanitarian groups, such as UNICEF, have "discovered" the needs of the Pygmies and have started a range of interventions to decrease their marginalization and exploitation. Missionary activities in formal education and health care have expanded in several rural areas occupied by forest foragers because impoverished central African countries are unable to provide public services in these areas or Pygmies are not allowed access to these services because of discrimination or marginalization. Many of the intervention programs target the hunter-gatherers.

The conservationists, humanitarian groups, national governments, and missionaries all intervene in the lives of Pygmies, often with little or no research guiding or informing their policies. All of the chapters should be of interest to Congo Basin development agencies, but the chapters on cultural diversity (chapter 1), political history (chapter 4), health (chapter 5), forager-farmer relations (chapter 11), tropical forest conservation (chapter 12), and representation (chapter 10) should be particularly instructive in establishing public policies.

Terminology

Pygmy

Historically, the groups discussed in this book have been referred to as "Pygmies." The word originated in Europe and emphasizes stature. Homer first used the word "Pygmy" in the Iliad, coming from the Greek word *pugon* (cubit or about 30 cm), to refer to mythical short people who fought cranes. The term was reintroduced by Georg Schweinfurth in 1873 and subsequently adopted by European and American explorers in the Congo Basin in the 1800s to describe the short-statured rainforest hunter-gatherers they encountered in their exploratory travels (see chapters 1, 2, and 5 for more details of the history of Pygmy studies and the use of the term).

Unfortunately, although numerous alternative terms have emerged, none have been agreed upon by academics or the people themselves to replace it. Researchers actively debate whether to use the term *Pygmy* in their publications. French biological and social anthropologists recently decided to use the term *Pygmy* for a collection of papers in *Journal des Africanistes* (2012) because they felt the term was globally recognized, that not all Pygmies were hunter-gatherers, and not all of them lived in the rainforest. Some British and central African social anthropologists, politically active nongovernmental organizations (NGOs), and some development agencies also regularly use the term *Pygmy* because it is widely recognized by the public, is often used to refer to the first peoples in Congo Basin countries, and strengthens the peoples' political position as they seek land rights.

Pygmy is a popular term and easily recognized by a broad group of people in Europe, Japan, the United States, and Africa, and that is why it is in the subtitle of this book. International and local NGOs that use the term *Pygmy* in their titles or literature include the following: Pygmy Survival Alliance, Forest Peoples' Programme, Survival International, Rainforest Foundation, Réseau Recherches Actions Concertées Pygmées, Centre d'Accompagnement des Autochtones Pygmées et Minoritaires Vulnérables, and the Association for the Development of Pygmy Peoples of Gabon. Congo Basin conservation groups, such as World Wildlife Fund and Wildlife Conservation Society, and international human rights groups working in the region, such as UNICEF and Integrated Regional Information Networks (IRIN), also regularly use the term *Pygmy* in their literature.

Some academics and Central African government officers feel *Pygmy* is derogatory or does not adequately represent the people. Republic of Congo (ROC) has outlawed the use of the term because it is viewed as pejorative. Some Cameroonian officials indicate the term is used as an insult and instead use the term "four Bs" to refer to the four forager groups in Cameroon (Baka, Bakola, Bagyeli, and Bedzan) (Robillard and Bahuchet 2012). Pygmy is used somewhat less frequently by US and Japanese anthropologists for a wide

variety of reasons; some feel it is a colonial and Western term that emphasizes racial (i.e., physical) features, some feel it has a pejorative meaning in the local area where they conduct research, while others prefer to use other ways to characterize the people, such as their mode of subsistence or thought.

Hunter-Gatherers, Forest Foragers, and Autochtones

Some researchers prefer to use the terms *hunter-gatherers, foragers,* or *forest foragers* to characterize the people. Some researchers are critical of these terms because they are too general, Western-biased, and do not represent all Pygmy groups and are therefore misleading representations. For instance, not all Pygmies live in the forest, such as the Bedzan of Cameroon and the Twa of Rwanda and Burundi, and not all Pygmies are huntergatherers or foragers (mobile hunter-gatherers are called "foragers" while sedentary hunter-gatherers are called "collectors") all year. But it is also true that not all Pygmies are very short, such as the Bongo in Gabon and the Twa of the Democratic Republic of Congo. Some are critical of the forager and hunter-gatherer representations because they emphasize mode of production, which is viewed as a Western bias toward economic relationships.

The various critiques remind us to be cautious when using terms to generalize about such a large population and that pronounced diversity exists both between and within ethnic groups. However, it is my position that the terms forest foragers and hunter-gatherers are not necessarily misleading. No term will represent 100 percent of the ethnic groups considered, so I prefer instead to use an 80 percent criterion: if 80 percent or more of the ethnic groups have a particular feature, it seems reasonable to use the trait to generalize about the people. Of course, it then becomes a question of which features researchers, the local people, or others want to use to describe the people, but here we limit the discussion to the terms that have been used in the literature by field researchers. Chapters 2 and 5 show that the peoples described in this book are almost always shorter than their neighbors; therefore, stature could be used as a defining characteristic. If one examines Bahuchet's list of ethnic groups in table 1.1, in chapter 1, over 80 percent of them live in the rainforest, so it seems reasonable to generalize that most are tropical rainforest groups. The Twa of Rwanda and Burundi no longer live in forests, but their traditional way of life was associated with forests before the trees were destroyed to farm and raise cattle.

The terms *foragers* and *hunter-gatherers* are problematic because many of these people farm at least part of the time. But while most have taken up some form of agriculture, most people view themselves as forest hunting and gathering specialists and often spend several months of the year foraging, both near and far away from villages. Barnard (2002) also points out that the terms *foragers* and *hunter-gatherers* can be used to refer to a mode of subsistence

or a mode of thought. Many San peoples in Southern Africa, where Barnard conducts his research, are no longer full-time hunter-gatherers and live in sedentary villages. They continue to hunt and gather from the villages, but they maintain forager modes of thought, such as values and social norms that emphasize egalitarian social-political relations, individual autonomy, immediate return ways of thinking, and extensive sharing and giving. Many Congo Basin foragers have started to farm, some farming as often as their neighbors (e.g., Koya in Gabon (Soengas 2012)) and some growing cash crops such as cacao (e.g., Baka in Cameroon (Oishi 2012)), but even in these contexts, forager modes of thought persist and are distinct from those of their neighbors (e.g., Baka in Cameroon (Yasuoka 2012)). Egalitarian social relations, autonomy, and other features of the forager ethos continue to be transmitted to children in these acculturated and sedentarized contexts (Hirasawa 2005; Nobutaka 2013). Although precise measures do not exist, it is likely that more than 80 percent of Congo Basin foragers continue to hunt and gather at least several months of the year, view themselves as forest hunter-gatherer specialists, or have forager modes of thought. The term forager-farmer may be a more precise descriptive term, but at this point I do not to introduce a new term.

Finally, some authors (chapters 4 and 12), Congo Basin government officials (e.g., in ROC, DRC, and Gabon), and human rights groups previously listed refer to Congo Basin forest foragers as "autochtones" or "indigenous." Unlike South America, Australia, and other parts of the world, most African ethnic groups meet the World Bank's criteria to be considered indigenous. All black Africans are indigenous to the continent; Rwandan government officials take this position and consequently do not recognize the Twa as autochtones. But in the African context, the African Commission of Human and People's Rights (ACHPR and IWGIA 2006) assert that

almost all African states host a rich variety of different ethnic groups.... Basically all of these groups are indigenous to Africa. However, some are in a structurally subordinate position to the dominating groups and the state leading to marginalization and discrimination. It is this situation, which the indigenous concept in its modern analytic form, and the international legal framework attached to it, addresses.

Pygmies are often marginalized, discriminated against, and placed in structurally subordinate positions by non-Pygmies and are therefore considered "indigenous" by international standards (see chapters 11 and 12). Some Congo Basin countries may not use the term *indigenous* in their narratives about Pygmies, but they consistently recognize Pygmies on the radio, TV, and at national celebrations as the "first peoples" of the country.

Personally, I try to limit the use of the term *Pygmies*, but not because it connotes short stature or is inherently derogatory. When I first traveled to Africa in 1971, Ethiopians and Ugandans said I should try to see the Pygmies.

At first I thought they said this because they thought I wanted to see exotic short people, but instead they emphasized their unique music, exceptional dancing abilities, and knowledge of the forest. Africans seldom mentioned their stature. Over time, I came to realize that non-Pygmy peoples in the Congo Basin have their own words to refer to their forager neighbors (e.g., bambinga in the Aka area) and that their words have both positive and negative connotations. On the positive side, Pygmies are known for their supernatural abilities (e.g., to turn invisible, transform into an elephant, or cure supernatural ailments); singing and dancing abilities; herbal and forest knowledge; and high fertility (their infants are viewed as resilient). On the negative side, foragers are viewed as primitive, dirty, lazy, and as thieves (see chapter 11 for more details on how non-Pygmies view forest foragers). Farmers in the area where I work call their children bambinga when their children disobey, and Boyette (2013) shows that farmer children use the term to insult each other. I try to limit my use of the term *Pygmy* because local Bantu, Oubanguian, or Sudanic words that refer to forest foragers and the French and English terms Pygmée and Pygmy can have negative and pejorative connotations. Another issue with the term is that it gives the public the incorrect impression that a single culture or ethnic group exists.

Terms for Forest Neighbors

Issues also exist with terms that refer to ethnic groups that live next to, interact with, and often have complex socioeconomic relationships with Pygmies. Researchers use "non-Pygmies," "Bantus," "farmers," "villagers," "neighbors," or "the others" to generalize about these groups. The terms are problematic because they gloss over the extensive diversity between the 150 different nonforager ethnolinguistic groups that exist in the Congo Basin (Joris and Bahuchet 1994). Some groups are primarily fisherfolk, such as the Kwélé of Cameroon or the Monzombo of the Central African Republic (CAR), and seldom farm. Some researchers are critical of the terms *farmers* or *villagers* because, like above, they emphasize mode of production and emphasize a simplistic dichotomous contrast to hunter-gatherers (e.g., forager-farmer differences). Several researchers do not use the term *Bantu* because it is a linguistic term for a particular group of languages and many groups that associate with Congo Basin hunter-gatherers speak non-Bantu languages such as Sudanic or Oubanguian languages.

Using the 80 percent criterion previously described, it seems reasonable to use the terms *farmers, agriculturalists, villagers,* or non-Pygmies to refer to ethnic groups that regularly interact with Congo Basin hunter-gatherers. More than 80 percent practice farming and live in sedentary villages most of the year, and most are taller than their hunter-gatherer neighbors. The term *Bantu* should not be used because (1) it is a linguistic category and several farmer groups do not speak Bantu languages, and (2) it is often contrasted with *Pygmy* (e.g., Pygmy-Bantu social relationships), which gives the impression it is a physical rather than a linguistic category.

Lewis (chapter 8) designed an alternative solution to refer to the different groups in his region by using emic words (i.e., from local people). He uses the forager term *bilo* for farmers or villagers and *Yaka*, a term several forager groups use for themselves. These terms work well with some ethnic groups in ROC and CAR but are not applicable to other areas and groups. For instance, the Baka of Cameroon use the term *kaka* to refer to farming neighbors. *Twa* is also an important emic term that is used by Bantu-speaking farmers in several areas of the Congo Basin, especially in the DRC, to refer to their Pygmy neighbors. Some DRC ethnic groups use this name to refer to themselves, but others do not.

Conventions

The authors of these chapters were encouraged to use the names of specific ethnic groups whenever possible (e.g., Aka, Baka, and Efé), but it was left up to each researcher to decide whether she or he used the term *Pygmy*, *hunter-gatherers*, *forest foragers*, *indigenous*, or *autochtones*. All are considered synon-ymous unless noted otherwise by an author. The same is true for general terms to refer to ethnic groups associated with the hunter-gatherers; the authors decided whether they preferred to use *non-Pygmies*, *farmers*, *agricultural-ists*, or *neighbors*, and all are considered synonymous unless noted otherwise.

Prefixes for Bantu languages and peoples have generally been omitted. For instance, the plural forms of Bantu-speaking forager ethnic groups (Ba)aka, (Ba)mbuti, (Ba)kola, (Ba)bongo are often removed and referred to as Aka, Mbuti, Kola, and Bongo.

Characteristic Features

Anthropologists have tried to identify cultural and biological features that distinguish Congo Basin hunter-gatherers from their neighbors. Bahuchet (chapter 1) and Verdu (chapter 2) review the history of anthropologists' attempts to identify cultural criteria, and Froment (chapter 5) provides a history of how biological anthropologists have characterized Pygmies. Verdu (chapter 2) summarizes studies of cultural criteria and finds that African Pygmy ethnic groups (1) identify themselves as distinct from neighboring groups and the neighboring groups identify the Pygmies as a distinct group; (2) are recognized by neighbors as specialists in forest activities (e.g., hunting, gathering, or fishing) or knowledge (ecological or supernatural); (3) have very mobile settlement patterns; (4) have complex socioeconomic, political, and ritual relationships with specific neighbors; and (5) are often recognized as outstanding musicians, sometimes with specific musical instruments and vocal techniques.

Verdu (chapter 2) and Froment (chapter 5) identify contemporary biological characterizations and indicate that Congo Basin hunter-gatherers (1) are genetically distant from their neighbors, (2) are shorter in stature than their neighbors, and (3) have relatively low faces, wide noses, and thin lips in comparison to their neighbors.

Rupp (chapter 8) is critical of these generalizations, Bahuchet (chapter 1) points out that many Pygmy ethnic groups do not fit the classic cultural criteria (i.e., live in forests or are mobile), Verdu (chapter 2) describes considerable genetic variability, and Froment (chapter 5) emphasizes that morphological features (e.g., height and body shape) are not dichotomous (present or absent physical traits) but clinal in that they are often found to various degrees or gradients across the Congo Basin.

In general, the cultural and biological characteristics described above are especially pronounced among the Efé and Mbuti foragers in the Ituri Forest in the eastern part of DRC; intermediate among Aka and Baka groups in the CAR, ROC, and Cameroon; and least common among the Bongo and Koya of Gabon (i.e., there is an east-to-west gradient of classic features; see figure 1.1 for the locations of these groups). The debate on distinguishing features of Congo Basin hunter-gatherers will continue, but they provide a starting point for discussing the unity and diversity in their biology and cultures.

Unity and Diversity

The subtitle of the book emphasizes diversity of African Pygmy cultures, histories, and biology (genes and morphology) because recent research with more ethnic groups has documented immense intracultural and intercultural diversity. Chapters 1, 10, and 11, in particular, emphasize diversity. Rupp (chapter 10), for instance, suggests Pygmy and non-Pygmy differences have been exaggerated and that the groups share more cultural similarities than differences. Bahuchet (chapter 1) provides an excellent overview of African Pygmy linguistic and cultural diversity. His figures 1.1 and 1.2 identify the locations of over fifteen known ethnic groups and table 1.1 gives the names, approximate population sizes, and linguistic families of the larger or betterdocumented groups discussed in this book. It is worth pointing out that the population sizes of the ethnic groups are estimates, and we really have a very poor understanding of the total number of forest foragers.

By contrast, chapters 4 and 8 accentuate the commonalities of Congo Basin hunter-gatherer cultures and point out that they are generally, but not always, more egalitarian, share more extensively, value autonomy more highly, and have a more intimate relationship with the forest than do their neighbors. Chapters 2 (genetics) and 5 (morphology) describe immense biological diversity between Pygmy groups and identify several traits that Pygmies share with non-Pygmies, but they also point out that Pygmies' genes and morphology are statistically different from non-Pygmies. As mentioned above, the differences are what geneticists call "clinal" (i.e., exist on a continuum or gradient) rather than dichotomous. Like chapters 2 and 5, chapters 7 (music) and 9 (child development) describe both uniformity and diversity. Evidence exists for both extensive diversity and some uniformity in African Pygmy cultures, languages, and biology. Congo Basin hunter-gatherers have been around for 70,000 years; currently occupy an area of about 3.7 million km², larger than France and India combined; and live in assorted and sundry natural and social environments with different histories of culture contact, so it is not surprising to find profound cultural and biological diversity. Genetic data suggest limited intermarriage with non-Pygmies until relatively recent times, which helps to explain the shared biology, while the shared features of culture that are often identified (chapters 4 and 8) are common to most mobile hunter-gatherer groups in all parts of the world (i.e., egalitarianism, extensive sharing, and high value placed on autonomy). The common cultural characteristics of forest foragers appear to be particularly resilient and adaptive features to a hunter-gatherer way of life in many parts of the world.

Fürniss (chapter 7) uses the metaphor of a "family portrait" to illustrate the links between diversity and commonalities. Everyone in the family is somewhat different from each other genetically and behaviorally, but everyone also shares some resemblances and others recognize them as a family. Profound intercultural and intracultural diversity exists within and between Congo Basin hunter-gatherer ethnic groups, but individuals and ethnic groups also share some cultural and biological features.

Organization of the Book

Serge Bahuchet is one of the most respected and prolific (several books and over fifty book chapters and journal articles) contemporary researchers on African Pygmies and uses chapter 1 to introduce the reader to the pronounced cultural and linguistic diversity between ethnic groups. He provides overviews of extensive variability in hunting and gathering techniques, music, and relations with farmers and offers explanations for the diversity.

Chapters 2–4 use a variety of techniques and approaches to examine the history of Congo Basin hunter-gatherers. Chapter 2, by Paul Verdu, utilizes recent methodological advances in genetics to summarize the deep as well as recent history of Pygmies. Luca Cavalli-Sforza initiated the classic genetic marker studies of African Pygmies in the 1960s that eventually led to his mapping the genes and deep histories of human populations around the world. Verdu summarizes the new developments in genetic sequencing and statistical modeling and describes how they have been applied to understand the origin and distribution of African Pygmy ethnic groups.

Chapter 3, by Karen Lupo, Jean-Paul Ndanga, and Chris Kiahtipes, takes an archaeological and multidisciplinary approach to understanding when, how, and why Congo Basin forager-farmer relationships emerged. They hypothesize that metallurgy played a key role in the emergence of foragerfarmer inequalities. Robert Moïse's chapter 4 utilizes oral and written historical records from the Congo Basin to demonstrate that Pygmies have historical traditions (e.g., commitment to autonomy and entrepreneurialism) in the precolonial period that were substantially different from those among their farming neighbors, described as "equatorial traditions" by historian Vansina (1990).

Chapter 5, by Alain Froment, is longer than other chapters because it covers both the human biology and health of Congo Basin hunter-gatherers. He outlines historical studies of stature and summarizes research on Pygmy morphology (head shape and body proportions) and studies of nutrition and infectious and parasitic diseases. Finally, he reviews and critiques an array of hypotheses used to explain why Pygmies are short-statured.

Chapter 6, by Hiroaki Sato, is a shorter chapter and differs from other chapters in that it reviews one major research question in Congo Basin huntergatherer studies: can foragers live in the rainforest without trade relations with farmers who provide agricultural products? He turns to his recent field data and reviews other studies to answer the question. He concludes that forest resources in southeastern Cameroon are able to support a foraging life independent of agricultural products. Chapters 3 and 12 also briefly address the wild yam question.

Chapter 7 shifts attention to more cultural topics with Susanne Fürniss's systematic comparison of the music traditions of the major Pygmy ethnic groups. The chapter clearly illustrates the diversity in the performance, instruments, vocal techniques, and musical features between groups, but at the same time identifies a "family resemblance" in the "family portrait" of Congo Basin hunter-gatherer music.

Chapter 8, by Jerome Lewis, focuses on "remarkable similarities" in egalitarian social organization across Congo Basin hunter-gatherer groups and provides rich ethnographic details of the dynamic processes of demand sharing, play, and other mechanisms that promote egalitarianism and extensive sharing among the Mbendjele Pygmies of the ROC. Lewis concludes that egalitarianism is a core feature of Pygmy life that cuts across political, moral, economic, and other domains of daily life.

Chapter 9 provides an overview of studies conducted with forager infants, children, and adolescents. Features of child development common to several groups include multiple childcare, allomaternal nursing, relatively high involvement by fathers, frequent cosleeping throughout life, and high physical and emotional proximity to parents and others. Intercultural and intracultural diversity exists in these patterns, and explanations are provided to explain both the commonalities and diversity of observed patterns.

Chapter 10, by Stephanie Rupp, critiques the term used to describe peoples of the Congo Basin turns to her own ethnographic experiences and data from Cameroon to demonstrate that existing terms, such as *hunter-gatherers* and *Pygmies*, are misleading because forest people utilize a vast array of identities that cut across subsistence and physical features. She argues that many types of identities exist among forest peoples and communities and that they are always changing in response to modifications in spatial and social circumstances (i.e., they are "multiangular").

Chapter 11, by Kiyoshi Takeuchi, reviews all the research on the nature of forager-farmer relationships in the Congo Basin. He examines ideological (i.e., how they view each other); economic; and social, kinship, and ritual features of these complex relationships. He describes extensive diversity in these relationships and develops a creative system to classify forager-farmer relationships into four general types based on the relative levels of subordinate or autonomous structures in the relationships.

The final chapter, by Mitsuo Ichikawa, addresses a major development question facing forest foragers: how can local indigenous forest foragers maintain access to forest resources they depend on to survive when global conservation groups (e.g., World Wildlife Fund and Wildlife Conservation Society) want to protect tropical forest floral and faunal diversity? Conservation groups have established several parks and reserves in central Africa to protect forest faunal and floral diversity, but this has often led to restricting forager access to traditional lands and essential resources. Ichikawa reviews the political and economic dimensions of the issues, including the bushmeat trade and logging, and recommends that greater emphasis should be placed on community forest utilization of non timber forest products (NTFPs).

Overall, the volume aims to provide overviews of Congo Basin huntergatherer research conducted by researchers from all parts of the world in the last forty years. The book also strives to cover a diverse range of topics and is open to alternative theoretical and methodological approaches—cultural and biological methods and data as well as ecological, evolutionary, postmodern, and cultural theoretical orientations. Several of the researchers in this volume disagree on particular issues, but all are supportive of integrating the diverse data and approaches into this volume.

Limitations and Biases

Limitations and biases exist in this book and in Congo Basin hunter-gatherer research. First, most of the research since the late 1980s has been conducted with western Congo Basin groups. Bahuchet (chapter 1) quantitatively demonstrates in figure 1.3 that western Pygmies have received the most academic attention. While research from eastern and southern hunter-gatherers is reviewed in several chapters, little research has been conducted with ethnic groups in these areas since the late 1980s because of the extensive political instability in the DRC. Future research is urgently needed in these areas.

Second, as reviewed elsewhere (Hewlett and Fancher, in press), ecologically oriented scholars dominate research with Congo Basin foragers. The ecological and evolutionary bias has a long history in the anthropology of Congo Basin hunter-gatherers as exemplified in the German *Kulturkreise* (culture circles) school where Pygmies had a special evolutionary position as *Naturvolk* (people in close relationships with nature) (Schmidt 1939). Congo Basin foragers usually (see Bahuchet, chapter 1, for exceptions) identify with the rainforest milieu, are fundamentally shaped by it, and often express a strong preference for forest life (Hewlett 1996), but research in the region has focused on the economic domains of forest life while neglecting other dimensions such as marriage and the family, social and emotional relations, and religion.

Ecological approaches have made significant contributions to our understanding of human-nature relations, but few studies exist that provide us with insights into how Congo Basin foragers think and feel about their lives. We know how many calories of meat they eat each day, how much time they spend hunting, and how much time they spend with infants, but we know little about how forest foragers think and feel about what is important to them—the forest, family relationships, religion, and so on.

Finally, relatively few African anthropologists have conducted research with forest foragers. Jean-Félix Loung (1967) was one of the first African anthropologists to conduct research with forest foragers, and Godefroy Ngima Mawoung (2006) is one of the more recent to publish. African anthropologists' research with forest foragers often takes place in the context of development (e.g., establishing parks or building an oil pipeline), so their work shows up in reports rather than academic publications. Scholars from Congo Basin countries are also usually trained in European universities, and their advisors often impact their research interests and perspectives (i.e., they are often ecologically oriented). But even with these constraints, we need more African scholar research with forest foragers. In the near future it is also possible that forest foragers will complete courses in higher education and begin to contribute to the research literature. Their intimate lived experiences in the Congo Basin will provide alternative and useful views on Congo Basin forest peoples.

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