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Reconstructing Lokono Contributions to Science

The Life Work of Johannes Karwafodi

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Abstract

Since the first colonial encounter, Indigenous people have shared their unique systems of knowledge with colonial actors. Yet, their roles in colonial research and their contributions to Western science remain both obscured by the careers of their collaborators and segmented by the bounds of the disciplines they helped advance. This article is an attempt at reconstructing and recentering the life work of Johannes Karwafodi, a Lokono man from the early-twentieth-century colony of Suriname who worked with Surinamese, Dutch, and international scholars, most notably, the Penard brothers (anthropology, zoology), De Goeje (linguistics, anthropology), Stahel (ethnobotany), and Abbenhuis (anthropology). At the same time, this in memoriam is a contribution to the study of science making in the colony, its actors, formats, methods, and conditions, written with the view to contextualizing its outcomes more broadly and stimulating new research into the roles that Indigenous people played in creating them.

Keywords

Lokono – Arawak – Suriname – knowledge production – colonial research

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Awadoli afoda adeberotoh ada, tohmora ada ina khoro tohrokosa.
The wind blows tall trees, but tree stumps it does not shake.
Lokono proverb by JOHANNES KARWAFODI (DE GOEJE 1928:270)

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The materials collected, photographed, penned, or otherwise created by colonial actors can open a window on the history, beliefs, customs, arts, and languages of the first inhabitants of colonized lands. But we understand full well now that the body of knowledge about Indigenous peoples that the colonial apparatus left us shrouds both Indigenous and non-Indigenous contributions. My main concern lies with the former. I intend to reconstruct the scientific legacy of Johannes Karwafodi—one of the unremembered Indigenous men and women who cocreated colonial science (Figure 1). While his colleagues went down in history for the work that he (and other Indigenous people) coproduced, his contribution has received only a partial reading. His efforts are poorly acknowledged and fragmented by the different disciplines he helped advance, preventing us from seeing his legacy in its entirety. This in memoriam article paints a comprehensive picture of his multidisciplinary legacy for his community, hopes to induct him into the academic hall of fame of the historically intertwined nations of Suriname and the Netherlands, and stimulate research into the roles Indigenous people played and continue to play in science.

To reconstruct and recenter Karwafodi's work, I searched for mentions of his work in scientific publications, other research outputs (such as herbarium collections), and other documentation (including newspaper and photographic archives). While these sources offer informative inroads into his work, it must be noted that our picture of Karwafodi is for the most part painted by his peers and must be read against their work and careers. It is the contrast between his actual contributions and how they have been framed in the work of his peers that brings to light the role academic practices and disciplinarity play in making his work invisible. This is one of the organizing principles of this article. The choice of the platform to publish these findings is also linked to my goals. The *New West Indian Guide*, or *De West-Indische Gids* as it was called between 1919 and 1959, was *the* scientific forum for debates about the colony. It is on the pages of this journal, the oldest journal with a focus on the Caribbean, that in memoriams of Karwafodi's collaborators appeared. Karwafodi's efforts are deserving of the same spotlight and they complete the accounts of the scientific progress that we tend to associate with his peers.

To highlight the racist reality Karwafodi lived in, I first elaborate on the many names under which his work is concealed in the literature. I then report on the time and place in which he lived and on his formal and informal education. I then move on to the research projects he was involved in. His first research experience was instigated by the Penard brothers. His input into this research is difficult to assess due to the metadata standard applied by the brothers. But by discussing the brothers' ornithological and anthropological work side by side,

FIGURE 1 Johannes Karwafodi, 1928, Paramaribo
SOURCE: PORTRET VAN DE ARAWAK-INDIAAN JOHANNES BAPTIST UIT SURINAME, NATIONAL MUSEUM OF ETHNOLOGY, LEIDEN, THE NETHERLANDS, CAT. NO. RV-A115-3-53. LAST ACCESSED JUNE 14, 2021, HTTPS://HDL.HANDLE.NET/20.500.11840/895669

we gain important insights into the roles Indigenous men played in their work. I then move rather quickly through the salient points of Karwafodi's long-term contribution to the study of the colony's plants. The reconstruction of his work relies in this case on newspaper articles and notes on the sidelines of research. Next, I zoom in on a short yet fruitful encounter with Claudius de Goeje, a key voice in colonial research on Indigenous languages. I highlight Karwafodi's use of letters to transfer knowledge to the metropole and foreground the least known of De Goeje's visits to the colony. Finally, I present another epistolary collaboration that Karwafodi forged with Father Abbenhuis, a Dutch mission-

ary. The exchange required him to take on the role of a researcher and produced a survey written in part by Karwafodi, an example of an autoethnography anno 1932. In the discussion, I sum up Karwafodi's work, discuss what he might have gained from these collaborations, and examine how his efforts relate to those of other Indigenous people and the current discussions about Indigenous knowledge and academic practices. With these goals in mind, I invite the reader to contemplate the proverb passed on to us by Karwafodi and chosen as the epigraph for this article. I return to these words of wisdom in the conclusions.

1 The Life Work of Johannes Karwafodi

The recentering of Karwafodi's work must start with the names he has been given, which speak to the racist reality he lived in. In the early-twentieth-century colony, the names "Indian" and "Arawak" were used in public to talk about his nation, and Karwafodi's contribution is sometimes made invisible by such terms. In the preface to his grammar, for example, De Goeje mentions him and his cousin merely as "two Arawaks," while the herbarium collections he cocreated report his finds often with the Latin abbreviation *leg. indig*. (meaning Indigenous collector; see further in this section). The racist *roodhuid* (literally "redskin") was acceptable too.[1] When Karwafodi was named, little effort was put into referring to him consistently. His work is hidden behind his Lokono names, Sasamali Karwafodi, and his baptismal names, Johannes Baptist, all spelled inconsistently. The liberty with which his peers referred to him hinders the reconstruction of his work; it is important therefore to list the sources that make it clear that the names refer to the same man: De Goeje (1928:273), T. Penard and A. Penard (1926b:497), and Stahel (1944b:278).

How should we refer to him? Given how Lokono people introduce themselves today, I begin by saying that his mother was from the Karwafona family, his father from the Shiwena, and his maternal grandfather from the Jubithana.[2] In the Lokono matrilineal system, he likely introduced himself as Karwafodi, a

1 De Goeje 1928:4. On the use of "roodhuid" in at least in private correspondence, see Correspondentie tussen A.P. en W.A. Penard en C.H. de Goeje, Leiden University Library, Special Collections, Cat. No. DH 787.

2 De Goeje 1928:197 and 273, 1942:212. The names, reported as Karuafona or Káluafuna, Šiwena, and Yübithano, are standardized to the spelling used by the families who live in Korhopa today in a modern Lokono orthography (Rybka 2013).

man of the Karwofona family. Sasamali (literally "handsome man"), or Sasa for short, was given to him by a medicine man or his grandmother, as was common practice then according to Karwafodi (Abbenhuis 1939:47; De Goeje 1928:272). In contrast to those who kept such nicknames secret from outsiders for fear of such knowledge being used against them, he shared his name with the people he worked with.[3] He referred to other Lokono people by their baptismal names in writing, but his children did not inherit his baptismal surname. Also, Sasamali is a private name, while Karwafodi is a recognizable Lokono name. For these reasons, I suggest remembering him as Johannes Karwafodi, a type of hybrid name that many Lokono bear today. His many names are also telltale signs of the changes that Lokono society began experiencing at the end of the nineteenth century. To understand his life work in full, I elaborate next on his formal and informal education, the historical moment in which he lived, and the trajectory it represented.

1.1 *From Korhopa to Paramaribo and Back to Matta*

Johannes Karwafodi was born in 1878 in Korhopa (Stahel 1944b:278), which is also known as Matta (Abbenhuis 1939:61). To contextualize his upbringing, it is worth discussing what life might have looked like in Korhopa at the time. For lack of documentation from Korhopa, I examine Voorduin's description of a Lokono village near the plantation Jodensavanne (literally "Jewish Savannah") written around the same time. The village consisted of a few matrilineal households, linked with one another by a network of paths. The people lived in thatched houses, used traditional utensils, and covered their skin with annatto (a plant-based dye). Women tattooed their faces and wore aprons, men sported loincloths. They were excellent hunters and farmers. The visitor, impressed by the "admirable neatness" of the village, even met a Lokono medicine man (Voorduin 1860:6–7).

And while Voorduin's visit predates Karwafodi, Julius Muller immortalized a moment in the life of a community near Jodensavanne at the time when Karwafodi was a child (see Figure 2). When Karwafodi was a child, his village likely also consisted of tightly linked families with limited access to the colony's capital, Paramaribo. His grandfather, Jan, was once its chief and his father-in-law was a medicine man. In his work, Karwafodi refers at times to the knowledge of his relatives, which speaks to the role they played in his education. Karwafodi

3 Abbenhuis 1939:47. The medicine men and spirits could harm people whose nicknames they knew. For this reason, alternative names were often adopted in interactions with outsiders (Roth 1915:304–7).

FIGURE 2 Indigenous settlement near Jodensavanne
SOURCE: PORTRET VAN EEN GROEP SURINAAMSE INHEEMSEN, JODENSAVANNE, TROPENMUSEUM, AMSTERDAM, CAT. NO. TM-60012326. LAST ACCESSED JUNE 14, 2021, HTTPS://HDL.HANDLE.NET/20.500.11840/449346

had a wife, referred to as his "first wife," perhaps followed by a second wife (Abbenhuis 1939:10). Given Korhopa's appearance in baptismal registers from the 1880s, he was likely baptized here or at Vier Kinderen where the people of Korhopa attended mass.[4]

As there was no school in Korhopa, at the age of seven he was sent to Paramaribo (Stahel 1944b:278). He attended a primary school and lived at an orphanage (Abbenhuis 1939:10), likely those attached to the St. Bonifacius church on Wanicastraat (now J.A. Pengelstraat). In 1892, when Karwafodi was 14, the orphanage housed some 60 "poor boys," while the school counted some 250 students, taught by Fathers Van Tooren, Heynen, and Kusters.[5] While the school did not maintain a high level of education (Wielzen 2007:24–26), Karwafodi likely learned Dutch there.

4 Wekker 1994. "Kerknieuws," *De Surinamer: Nieuws- en advertentieblad*, Paramaribo, May 19, 1904, p. 2. This article and others were consulted through the historical database Delpher https://www.delpher.nl/online/krantenarchief; last accessed June 14, 2021.

5 "Ramp op Java," *Suriname: Koloniaal nieuws- en advertentieblad*, Paramaribo, October 5, 1883, p. 3, Delpher, last accessed June 14, 2021.

FIGURE 3 Matta circa 1935
SOURCE: HUIS EN KERK TE MATTA BIJ PARAMARIBO, KITLV/ROYAL NETHERLANDS INSTITUTE OF SOUTHEAST ASIAN AND CARIBBEAN STUDIES, LEIDEN, THE NETHERLANDS, SOUTHEAST ASIAN AND CARIBBEAN IMAGES, CAT. NO. 54185. LAST ACCESSED JUNE 14, 2021, HTTP://HDL.HANDLE.NET/1887.1/ITEM:919669

After primary school, Karwafodi returned to Korhopa (Stahel 1944b:278). By the end of the century, contacts between Korhopa, by then called Matta, and the outside world had intensified. In 1911, a church replaced the medicine man's workshop and by 1924 a primary school opened (Figure 3).[6] A trip to Paramaribo, where his future collaborators lived, required a day trek to Republiek, from where a road led to town. Meanwhile the metropole had a great interest in the colony. In 1883, Surinamese peoples were displayed at the International Colonial and Export Exhibition in Amsterdam, while anthropologists at the Colonial Institute continued to justify racist policies.[7]

This is the context of Karwafodi's encounter with Western science. He had excellent mentors in his family, including specialists such as medicine men. He

6 Abbenhuis 1939:50; Anonymous 1964:139; Vernooij 1974:59.

7 Echoes of the said research are discernible in the work of Karwafodi's peers. The Penard brothers introduced their assistants with a description of their physique and character (F. Penard & A. Penard 1907:77–85). De Goeje (1906, 1908) included physical descriptions and mugshots of Indigenous people in his work. The people exhibited at the International Colonial and Export Exhibition were adults and children of Maroon, Kari'na, and Lokono origin. The exhibition attracted a million visitors, gave Amsterdam a large financial impulse, and put it on the tourist map of Europe.

was deeply rooted in his community, where he continued to work and live. But he was also familiar with the outside world and had basic formal education, the main benefit of which might have been acquiring Dutch-language skills which proved essential to his later work.

1.2 *An International Debut: Singing and Birding for the Penard Brothers*

The first to work with Karwafodi were Arthur, Fredrick, and Thomas Penard, self-taught ornithologists and anthropologists, whose most celebrated works include the volumes on the Kari'na worldview, Surinamese birds and mammals, and hundreds of newspaper articles on Indigenous oral knowledge and local animals (Habraken 2012; Husson 1978). They amassed the most comprehensive collection of Surinamese avifauna, earning money to publish their work and a medal from the Colonial Museum (Haverschmidt 1949:57–59). Notably, Arthur and Fredrick suffered from leprosy and never conducted fieldwork; Thomas, unaffected by the disease, moved to the United States. To understand how Karwafodi contributed to their work, I discuss their methodology, zooming in on their better-described ornithological work.

Unable to do fieldwork, the brothers worked with collectors: "they were assisted by many local woodsmen, hunters, and fishermen, among whom we may mention … many Carib and Arawak Indians" (T. Penard 1925:164). The Indigenous men, who proffered birds with metadata, including the names and significance of the birds in their cultures, and taught them their languages for their anthropological work (A. Penard & F. Penard 1908:x), were on the whole not named in the research output. However, writing about 2000 birds collected between 1912 and 1914, Bangs and Thomas Penard (1918:25) named three Indigenous men, including Saka and Pishot. Importantly, Saka was also their key Kari'na source, while Pishot collected birds in the 1920s that the brothers claimed to have "discovered."[8] This implies that the same men worked with the brothers for years and that the long-term work put the Indigenous men at risk. Leprosy was incurable at the time and colonial policy on leprosy was compulsory segregation: White people isolated at home, people of color were incarcerated (Menke, Pieters & Menke 2020:5). The brothers' work on Lokono likely followed the same format.

They started working on a dictionary in the 1900s—which was later lost—and published Lokono data first as part of their ornithological and Kari'na work (F. Penard & A. Penard 1907, 1:43; T. Penard 1927:266; Haverschmidt 1949:57).

8 T. Penard 1922, 1923a, 1923b; Correspondentie tussen A.P. en W.A. Penard en C.H. de Goeje, Leiden University Library, Special Collections, Cat. No. DH 787.

Their first work on Lokono alone appeared in 1926; "Four Arawak Indian Songs" is the only article in which they credit a Lokono man by name: "the following four songs were communicated to us in the year 1911 by our friend Sasamali, otherwise known as Jan, of the Arawak family *Kaluafudi*" (T. Penard & A. Penard 1926b:497). Two more articles followed (T. Penard & A. Penard 1926a; T. Penard 1927). The brothers' remarks about the goals of their writings suggest that the choice of *De West-Indische Gids* was deliberate (T. Penard 1925:164–65). The journal, printed in Amsterdam and distributed in Suriname, was the forum for debates about the colony, its contents featured in metropolitan and colonial press, and included articles in English, which befitted Thomas who had an academic career in the United States (Oudschans Dentz 1937:5).

Crediting Karwafodi may have been a move to present the texts as reliable, but the acknowledgement, written with detail not shown by the brothers before, implies they had been "friends" for 15 years. In this light, Karwafodi, the only Lokono man the brothers named in their work, likely worked with them for years and shared with them much of the Lokono knowledge they reported over the years. The first published Lokono songs, "simple and artless" to the brothers, offer us a glimpse of his knowledge. The commentary to "Walabatši Tokorotši," for instance, explains the floral metaphors used to refer to affines that only a Lokono man could decipher. We do not know whether such knowledge was transparent to all Lokono back then, but it was to Karwafodi, who could talk about his culture from a meta level. It rates a mention too that while it is unclear who identified the species within the botanical classification system for the brothers, Karwafodi worked for the colony's botanical labs. Even if he did not name the species for the brothers, he likely collected them for the labs, a part of his work I turn to now.

1.3 *In Full Bloom: Teaching and Learning about Plants at Colonial Labs*

While Karwafodi's work with botanists is described in more detail than that with the Penards, it is still unclear how long and under what conditions it unfolded. Gonggrijp noted that he was a "tree expert" at the Forestry Bureau, Dienst Boschwezen in Dutch, while Lindeman, who worked with Karwafodi in 1948, called him a "tree spotter" of the Bureau (Ek & Görts-Van Rijn 1990:28; Gonggrijp 1949:6). Since the name Dienst Boschwezen was used until 1928, Karwafodi must have worked there for years. Notably, the Forestry Bureau created three arboreta near Matta (Van 't Klooster, Lindeman & Jansen-Jacob 2003:13–14,19). Familiar with the area, Karwafodi likely contributed to the research carried out there, though no details about his work for the Bureau are known. His work for the Landbouwproefstation, the Agricultural Experimental Station, also lasted for an unspecified period of time, only incidentally described as

"long lasting."[9] The bulk of this research was conducted with Gerold Stahel, the director of the Station from 1919, who was made a knight of the Order of the Netherlands Lion and named professor of the Rijks Landbouw Hoogeschool for his achievements (Reyne 1955; Wellensiek 1954). According to Stahel, whenever Karwafodi came to town, he was "invited to our 10 o'clock cup of coffee, where the members of our Experiment Station and guests join for half an hour's recreation" (Stahel 1944b:278). While Karwafodi felt "perfectly at ease" there, Stahel's wording suggests that Karwafodi was not a member of the team. Indeed, it is unclear if and on what terms he was employed at both institutions. We do know that he embarked with Stahel on expeditions, some lasting "for weeks and months," and while no specific trips are named, a photograph of Stahel and Karwafodi affords us a glimpse of how their work might have looked (Figure 4).

Karwafodi and Stahel worked at a time when Western science gave little credence to Indigenous knowledge. For many botanists, for example, it was still unclear whether Indigenous binominal classification systems, analogical to the Linnean system, existed. Karwafodi's knowledge was therefore of interest to Stahel, who ultimately published on Lokono binomial plant names (Stahel 1944b). The article offered informative inroads into the Lokono nomenclature that organizes plants according to shape, taste, smell, size, and color. No less interesting are his notes about how Karwafodi identified trees, always cutting the bark to taste and smell it. As Stahel never singled out any other Lokono man by name, Karwafodi's knowledge must also form the basis of Stahel's monograph on the colony's useful plants, reprinted twice with the etymologies of plant names added from the article (Stahel 1942, 1944a, 1962). Karwafodi and Stahel were also the first to link the knowledge of Surinamese Indigenous people to herbarium vouchers, allowing species identification (Van 't Klooster, Lindeman & Jansen-Jacob 2003:16). In fact, the wood collection they created earned Karwafodi the title of "an outstanding expert on the plant life of the country," and it was suggested that any mistakes in the data be attributed to the younger Lokono contributors.[10]

Renske Ek and Anne Görts-van Rijn also list the work that Karwafodi did with Lindeman during an expedition to the coast and Nassau Mountains in

9 "Onderscheiding," *De Surinamer: Nieuws- en advertentieblad*, Paramaribo, April 26, 1947, p. 1, Delpher, last accessed June 14, 2021.

10 Author's own translation. Gonggrijp 1949:6; "Natuurwetenschappelijke studiekring voor Suriname en Curaçao," *Het Nieuws: Algemeen dagblad*, Paramaribo, April 12, 1946, p. 4, Delpher, last accessed June 14, 2021.

FIGURE 4 Karwafodi and Stahel in Paramaribo in 1940
SOURCE: PORTRET VAN PROFESSOR STAHEL MET DE HEER BATIST OP EEN OPEN VELD, TROPENMUSEUM, AMSTERDAM CAT. NO. TM-10020997. LAST ACCESSED JUNE 14, 2021, HTTPS://HDL.HANDLE.NET/20.500.11840/298574

1948 (Ek & Görts-van Rijn 1990:28; also Van 't Klooster, Lindeman & Jansen-Jacob 2003:14). Lindeman's (1952) ensuing publication and his notes with previously unpublished Lokono plant names do not, however, name the source. Joseph Lanjouw, from the Botanic Museum and Herbarium in Utrecht, also studied Stahel's work for *Flora of Suriname* edited by Pulle (Lanjouw 1955:15; Reyne 1955:6; Stafleu 1984:165). It is not surprising then that, according to Stahel, "the hundreds of Arawak names in Pulle's *Flora of Suriname* come from [Karwafodi]."[11] Yet, despite the accolades, Karwafodi's contributions to biore-

11 Stahel 1944b:278. Lanjouw was assisted by Stahel on his fieldtrip to Suriname in 1933 and might have also worked with Karwafodi then (Lanjouw 1935:215).

FIGURE 5 Voltzberg expedition, perhaps including Karwafodi (leftmost)
SOURCE: GROEP ONDERZOEKERS OP DE TOP VAN DE VOLZBERG, TROPENMUSEUM, AMSTERDAM CAT. NO. TM-10031558. LAST ACCESSED JUNE 14, 2021, HTTPS://HDL.HANDLE.NET/20.500.11840/453436

search are often open to conjecture. A photograph from 1920, for example, shows members of an expedition to Voltzberg, among them a man who looks like Karwafodi (Figure 5), but the resultant collection does not name the Indigenous collectors. The Latin abbreviation *leg. indig*. is used instead, though Tinde van Andel spotted two vouchers that do name Karwafodi which may help us to identify his handwriting and trace his work more precisely in the future (Figure 6).[12]

As in the case with the research led by the Penard brothers, scientific breakthroughs offer further details about Karwafodi's work. In 1945, for example, Harold Moldenke of the New York Botanical Garden asked Stahel for material on *Ropourea guianensis*, first described to the Western public by Fusée Aublet (1775, 1:198). The rub was that Aublet's description prevented Moldenke from

12 Tinde van Andel, personal communication. July 2021.

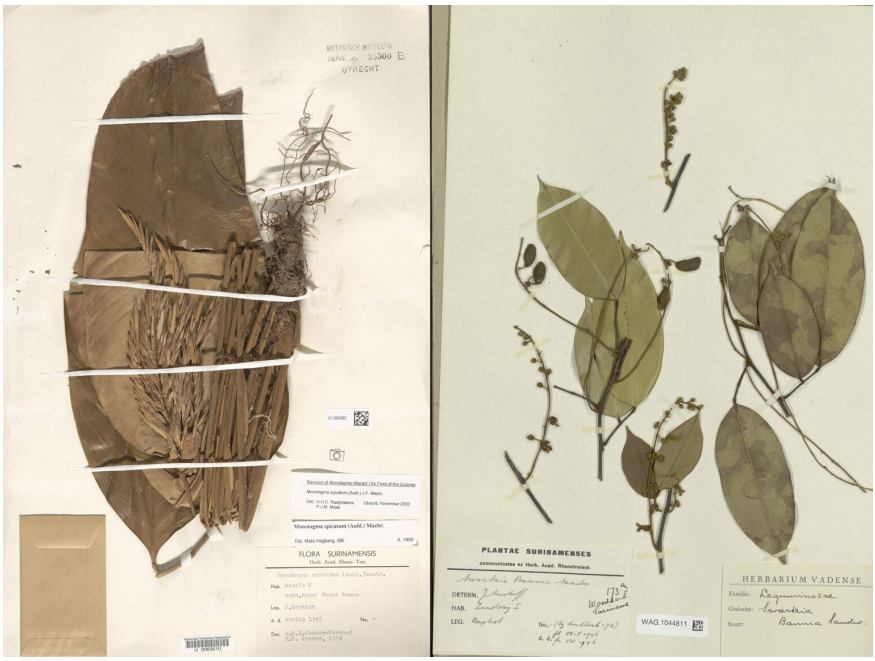

FIGURE 6 Examples of vouchers that name Karwafodi
SOURCE: NATURALIS BIODIVERSITY CENTER, LEIDEN, THE NETHERLANDS, CAT. NO. U.1382987, WAG.1044811. LAST ACCESSED JUNE 14, 2021, HTTPS://DATA.BIODIVERSITYDATA.NL/NATURALIS/SPECIMEN/U.1382987, HTTPS://DATA.BIODIVERSITYDATA.NL/NATURALIS/SPECIMEN/WAG.104481

determining the plant's affiliation (Reinders-Gouwentak & Stahel 1948:3). Stahel showed the description to Karwafodi, and though the text later proved to be partly wrong, Karwafodi identified it as Lokono *jawle wassilikodo* ("opossum's testicles"). By 1948, he had collected its stems, roots, fruits, seeds, and some 40 saplings and stumps. It was his "skill and knowledge" that allowed Reinders-Gouwentak and Stahel to correct Aublet's notes, analyze the wood of the plant, and "reveal its systematic position [as *Diospyros ropourea*] as far as possible" (Reinders-Gouwentak & Stahel 1948:7, 20). Another example of Karwafodi and Stahel's impact on research abroad comes from British Guiana. In 1944, Bassett Maguire of the New York Botanical Garden, Dennys Fanshawe of the Forest Department of British Guiana, and Stahel explored Suriname and British Guiana (Boom 1996:300). Fanshawe's ensuing article on Lokono plant names notes that they were compiled "partly from the records of the Forest Department …, partly from Dr. Stahel's notes in his article on Arawak plant names …, but mostly from the Arawak Indians themselves in British Guiana" (Fanshawe 1947:165). Its reprint also credited Jonah Boyan, a Lokono man attached to the

Department since its inception (Fanshawe 1949:57). In all likelihood, Stahel and Karwafodi's work inspired the work on Lokono plant knowledge in British Guiana.

In sum, Karwafodi had intimate knowledge of Surinamese flora. He shared his Lokono expertise with scholars working at the institutions leading colonial bioresearch and played an important part in the creation of major herbaria and the written documentation of Lokono plant knowledge. The science he coproduced had conspicuous repercussions and was appreciated by experts, who applauded his efforts in the press, incidentally providing us with details about his long-term work and daily routines. Needless to say, the physical vouchers of the herbaria collections have been used down the years to identify the taxonomic positions of new species, reevaluate previous identifications, and carry out other experimental research.

1.4 *Working Overtime: Discussing the Knowledge of Medicine Men with De Goeje*

So far, we have seen Karwafodi through the writings of others. By contrast, in the projects about language and culture, Karwafodi presents himself as an author of texts, albeit published by others, including Claudius de Goeje. To understand the role Karwafodi played in this research, I review De Goeje's work on Lokono.

De Goeje was a cartographer delegated to join the expeditions to the interior of Suriname under the auspices of the Royal Netherlands Geographical Society (KNAG, Koninklijk Nederlands Aardrijkskundig Genootschap), which allowed him to build a career as an expert on the colony's Indigenous peoples at Leiden University (Van Lier 1955:324). His study of Lokono started in 1907 when he collected a short word list (De Goeje 1928:246). His grammar of Lokono, finished by September 1927 in The Hague, was based on nineteenth-century sources (De Goeje 1928:3–4). However, soon after submitting it to the publisher, an opportunity to "clear up several doubtful points" appeared (De Goeje 1928:4). In November 1927, De Goeje traveled to Suriname (De Goeje 1929a:14). While in Curaçao, he wrote to Arthur Penard to ask for help in finding Lokono speakers and was advised to visit the Catholic mission (De Goeje 1929a:14–15). On February 7, a day after his arrival, he visited the mission and before long was working with Karwafodi and his cousin Alfons Orasi (De Goeje 1928:273). He also worked with Philip Samuel and Charles Aban, two Warao men, and collected word lists from Julius, a Kari'na, and an unnamed Lokono woman (Figure 7).[13] In

13 De Goeje 1928:246, 1931:1–2; De Goeje, Claudius, 1928. Published Glossaries, Leiden University Library, Special Collections, Cat No. Or. 8769.

FIGURE 7 Charles Aban, Johannes Karwafodi, Philip Samuel, and Gerold Stahel
SOURCE: GROEPSPORTRET VAN SURINAAMSE INHEEMSEN EN DR. G. STAHEL IN DIENS HUIS BIJ HET BESTUDEREN VAN DE INHEEMSE TALEN, NATIONAL MUSEUM OF ETHNOLOGY, LEIDEN, THE NETHERLANDS CAT. NO. RV-A115-3-60. LAST ACCESSED JUNE 14, 2021, HTTPS://HDL.HANDLE.NET/20.500.11840/895676

the remaining seven days of his trip, he visited old friends, including the Penard brothers.[14] On February 22, he left Suriname and on the way home analyzed the Lokono data: part of it was integrated into the manuscript, but the bulk formed a 63-page appendix (De Goeje 1931:2). Before the end of the year, the book was published, while De Goeje was already editing the Penards' Kari'na work and planning the publication of the Warao data.[15] Work on Lokono continued in 1937 following the same method. The outcome was based mostly on data proffered by Karwafodi and data collected by the Penards and Father Abbenhuis, who worked with Karwafodi as well.[16]

14 "Maaltijd," *De Surinamer: Nieuws- en advertentieblad*, Paramaribo, February 19, 1928, p. 2; "Samenkomst," *De Surinamer: Nieuws- en advertentieblad*, Paramaribo, February 19, 1928, p. 2; "Een uur met C.H. de Goeje," *De Surinamer: Nieuws- en advertentieblad*, Paramaribo, February 16, 1928, p. 1, all from Delpher, last accessed June 14, 2021.

15 De Goeje 1931:3 and 1933:102–3; Correspondentie tussen A.P. en W.A. Penard en C.H. de Goeje, Leiden University Library, Special Collections, Cat. No. DH 787.

16 De Goeje 1942:212 and 238, 1943:xiii. The appendix also includes word lists collected at

How and why did De Goeje produce so much within such a short time? The preface to the grammar, in which he thanks the mission for bringing him together with "two Arawaks" does not tell us much. The appendix, however, clarifies how: "[t]he phonetic spelling … has been used, with the exception of §§ 202, 204, 212, 216–22 and parts of §§ 203 and 214, which have been written down by Baptist in the Dutch spelling" (De Goeje 1928:246). That is to say, half of the appendix was written by Karwafodi; De Goeje added morpheme divisions. This was not a haphazard method: the Warao men also wrote texts for De Goeje.[17] What is more, half of the appendix was written after he left the colony and sent to him in a letter (De Goeje 1928:271). When it comes to why, De Goeje explained that he wanted to "save the vanishing data" with the help of Indigenous people who spoke Dutch.[18] But he also tried to prove that the sounds of "primitive" languages had meaning, as Lokono revealed "an inner and essential connection between the idea and the word" (De Goeje 1928:241). By contrast, as words conventionalized, the link between sound and meaning eroded, which to De Goeje defined "modern" languages (De Goeje 1928, 1929b, 1933). De Goeje also claimed that the speakers of the two types of languages differed in "philosophy," because "the primitives were or are still, affect people, sharp observers who intimately participate in the being of things … By [*sic*] us, reason has placed itself above it, and in the thinkers' minds the primal images have become abstract concepts" (De Goeje 1929b, 1944, 1946:104).

De Goeje's racist theory of "primitives" and "thinkers" was soon forgotten but his grammar of nineteenth-century Lokono with texts by Karwafodi was an achievement noted in the press on many occasions, though Karwafodi was not mentioned. The value of Karwafodi's texts and his knowledge included in later articles is multifold.[19] Their contents, concerning human–animal transformations and medicine men, are of value as primary sources about the spirituality and moral code of the Lokono people. Further, until then, such oral knowledge was known to outsiders only from translations (Brett 1880; Van Coll

Albina and Zanderij (§§ 194–201), Dutch texts by Karwafodi (§§ 213–213), and De Goeje's synthesis of what Karwafodi said (§§ 205–210).

17 De Goeje 1930:33, 1931:2. Examples thereof can be found in his notebook, see De Goeje, Claudius, 1955, Warao Vocabularies List, Leiden University Library, Special Collections, Cat. No. Or. 8768.

18 "Een uur met C.H. de Goeje," *De Surinamer: Nieuws- en advertentieblad*, Paramaribo, February 16, 1928, p. 1, Delpher, last accessed June 14, 2021.

19 "Over de Arowaksche taal," *De Surinamer: Nieuws- en advertentieblad*, Paramaribo, March 14, 1929, p. 2, Delpher, last accessed June 14, 2021.

1907, 1908; Roth 1915). Indigenous languages were deemed incapable of conveying complex abstract meanings.[20] Karwafodi's texts break with the tradition of excluding Indigenous languages from Surinamese literature.

Karwafodi's texts remain valuable, however, not only as a picture of the early twentieth-century Lokono culture painted on Indigenous terms. Written by a native speaker, the texts must also be seen today as some of the earliest primary language data on Lokono, that is, language data that come directly from a native speaker and are not colored by Westerners' ideas. Prior to their publication, the only sizeable Lokono texts were translations of evangelical texts (the texts that De Goeje's grammar is based on). Phonology offers an example of Karwafodi's abilities to document Lokono. Contrary to De Goeje's dismissive comment, Karwafodi's writing was not merely "Dutch spelling" (De Goeje's 1928:246). Karwafodi developed his own way of writing Lokono, adapting the Roman script to the sounds of Lokono better than De Goeje's seemingly objective "phonetic spelling."[21] As such, Karwafodi's texts are of great value to historical linguistics of Lokono and the Arawakan language family.

Finally, the picture of Lokono culture that Karwafodi's texts reveal, which speaks to his knowledge, is complemented by Lokono objects he collected and created, which speak to his craftsmanship. In a letter to the National Museum of Ethnology (Rijksmuseum voor Volkenkunde) in Leiden written in 1937 in Paramaribo, De Goeje reports that he bought several objects from Karwafodi and Charles Alfred, another Lokono man, for the museum.[22] Since De Goeje adds that Karwafodi may collect more objects after De Goeje's departure for the metropole, in which case Stahel will send them to the museum, it is not entirely clear which objects Karwafodi did collect. The only easily identifiable object that can be attributed to Karwafodi is a feather headdress (Figure 8). De Goeje, aware of the fact that such skills were already on the wane among the Lokono, notes in the letter that Karwafodi still knew how to make them and made this one himself. The object remains the only Lokono headdress in the

20 Brett's (1880:v) use of masculine rhymes in his translations, for example, reproduces the simplicity and naivety that Brett projected onto his "little red Indians."

21 To give an example, Karwafodi correctly distinguished three liquid phonemes—/l/, /ɾ/, /ɽ/—which he spelled consistently as ⟨l⟩, ⟨r⟩, ⟨rl⟩, respectively, and retained the integrity of the phoneme /o/, which has an allophone [u] before /i/. De Goeje had problems distinguishing the lateral sounds, of which he identified one too many, and split the allophones of /o/ into two phonemes. Cf. Karwafodi's *jorlie* and De Goeje's *juli* "tobacco" De Goeje (1928:201, 275–87).

22 National Museum of Ethnology, Leiden, the Netherlands, Correspondentiearchief 1837–1961, Cat. No. NL-LdnRMV-A1-121-596/597.

FIGURE 8
Traditional Lokono feather headdress made by Karwafodi
SOURCE: HOOFDTOOI, NATIONAL MUSEUM OF ETHNOLOGY, LEIDEN, THE NETHERLANDS CAT. NO. RV-2363–24. LAST ACCESSED JUNE 14, 2021, HTTPS://HDL.HANDLE.NET/20.500.11840/737972

collections of Dutch museums. Karwafodi received 21.5 guilders (or € 224, going by today's purchasing power) for the objects—the only occasion on which payment toward Karwafodi is mentioned.[23]

1.5 *The Final Word: An Indigenous Autoethnography* anno *1932*

Karwafodi's last project was a partly epistolary knowledge exchange forged with Father Abbenhuis. In this relationship, Karwafodi, by then a man of some 60 years, took on the role of a researcher and arguably a co-author. To bring to

23 "Waarde van de gulden versus de euro," International Institute of Social History, https://iisg.amsterdam/nl/onderzoek/projecten/hpw/calculate.php, last accessed June 1, 2022.

light his work, we must, however, review the rather complex structure of their *magnum opus* and the history of its production.

Father Richard Abbenhuis from the Brothers of Tilburg, known under his monastic name Maria Fulgentius, arrived in Suriname in 1923 to work in education (Jabini 2016:323; Van Kempen 2002, IV:37–38). He was involved in learned societies, including the Surinamese Ethnological Circle (Surinaamsche Ethnologische Kring), and published on the Catholic mission, history, geography, and peoples of the colony. He knew De Goeje and the Penard brothers, but thought they were wrong in attaching value to the beliefs of Indigenous peoples (Husson 1978:xxxi; Van Kempen 2002, II:140). His goal was to refute Roth's (1915) claim that Indigenous peoples remain true to their systems of beliefs despite ongoing Christianization (Abbenhuis 1939:5). In a letter to Karwafodi, he explained that he wanted to "broaden his knowledge about the Lokono for educational purposes" and that his interest lay particularly in how they lived right then because "from many books we know how the Lokono lived in the past, and it is often said that they still are like that, despite being Christians for a long time" (author's own translation, Abbenhuis 1939:9–10). To this end, he created five questionnaires, sent out to several villages. And hoping to find generational differences, he invented a three-point scale (child, adult, elder) with which the answers were to be marked. I review the surveys chronologically, reversing the order in which they were published.

The second to fifth questionnaires were answered in 1930 and 1931, respectively (Abbenhuis 1939:10, 61, 62, 65). The fifth consisted of 17 questions and was sent to several villages, including Matta. The fourth listed 26 questions and was preceded by a note that named the addressees, likely the addressees of questionnaire numbers 5, 3, and 2 as well, and states that Karwafodi's knowledge was integrated into the answers. The third contained 32 questions based on a mix of responses. The second listed six questions about Matta likely answered by Karwafodi, given the mention of "my grandfather, chief Jan." Finally, the first questionnaire of 139 questions based on a careful reading of Roth, accompanied by the letter mentioned above, was sent to Karwafodi only (Abbenhuis 1939:6, 9, 10, 33).

Karwafodi worked on the first survey between 1932 and 1933, answering the questions "partly in writing, but a large part was also communicated by word of mouth" (Author's own translation, Abbenhuis 1939:10). He wrote from personal experience, though rarely in the first person, but also conducted research in Matta, as evinced in references to the opinions of his relatives. He did not grade the answers, which incidentally suggests that most of the answers were communicated in letters. Otherwise, Abbenhuis would have had the chance to ask

Karwafodi to grade them. The spelling of Lokono words (and their Dutch translation) in the published book follows "the format Roth used or that in which the Indians themselves wrote in their written answers" (Author's own translation, Abbenhuis 1939:6). Ultimately, Karwafodi's answers were published in *Arawakken in Suriname: Enquête-materiaal voor een volkenkundige studie* in 1939, which retained the survey format.

In sum, Karwafodi was initially not included in Abbenhuis's mailing list but as research progressed, Karwafodi became his main collaborator. More than half of the text was written by Karwafodi, but his knowledge was also integrated into other parts of the book. He used self-reflection and writing to explore his personal experience and connect it to wider cultural and social meanings, a definition of autoethnography. It remains a rather poorly known source and its import today is significantly underestimated, perhaps because its authorship suggests a missionary disposition. Yet, the work authored by Abbenhuis brings together Karwafodi's knowledge of plants, animals, language, and culture and constitutes the first and only Lokono autoethnography, offering us a first-hand look into Lokono beliefs and practices.

The topics discussed in response to the 200 or so questions cannot be covered here in detail. Of the topics discussed in greater length, it is worth mentioning Lokono spirits, in particular those that are represented by the crystals in the medicine man's rattle, patterns of behavior vis-à-vis spirits, the links between spirits and star constellations, good and bad omens in the natural world, initiation rites, couvade, and the history of his village. As already noted, the data about medicine men and spirituality that Karwafodi shares in *Arawakken in Suriname* also formed the basis for De Goeje's influential articles on the Lokono medicine men and spirituality. Summing up, Karwafodi and Abbenhuis produced the first, and so far only, systematic ethnographic description focusing on Lokono culture alone. Karwafodi's contribution was substantial and largely independent.

2 Discussion

Karwafodi's involvement with colonial research can be analyzed from several angles. But before we begin, it is worth noting how his story converses with the work of other Lokono people in colonial times. Since the early days of the European conquest, the colonizers depended on the cooperation of local populations, both voluntary and forced. A few examples that involved the Lokono people will suffice. In the fifteenth century, the first outsiders to explore the region relied heavily on local guides. The first Lokono guide may have been

a man named Martin by the Spanish, who in 1594 met Raleigh, guided his reconnaissance, negotiated provisions with local leaders, and taught him about local flora and fauna (Raleigh [1595] 2006:23). Soon after, the Lokono became instrumental to the continuity and well-being of the colonies. In the 1627, for example, the English convinced a Lokono family from the Essequibo to relocate to Barbados "to cultivate tropical crops and, generally, to assist in the development of their settlement" (Handler 1969:39–41). We can get a glimpse of the Indigenous contribution to the colony's success by studying the history of *mobbie* (mauby). This lightly alcoholic Indigenous beverage became the favorite of the settlers, relieving their anxieties about obtaining potable drinks and enabling them to recreate English social customs away from home (Maggiolo 2010). In the eighteenth century, Lokono medicine man Jeptha, ten-year-old Jaantje, and seven-year-old Jonathan effectively translated the scripture and hymns from German for the Lokono congregation on the Berbice and traveled hundreds of miles to spread the word of God (Owen 2019). Later, when systematic studies of flora and fauna took off in the nineteenth century, Indigenous people were often merely a "ghostly presence"—as Pratt put it in the context of colonial projects in Africa—the invisible force thanks to which "our luggage arrived," as happened to Schomburgk (1845) in British Guiana (Pratt 2010). Alternatively, they were the object of semiformal ethnographic descriptions *à la* Im Thurn's characterization of the Warao people as "strikingly dull, unintelligent, and gloomy" (Im Thurn's 1883). From the early twentieth century onward, Indigenous people, Maroons, and people freed from slavery became part of many research projects. Stripped naked and selected for their physical strength, they were hired to hunt game, cook meals, carry luggage, and open paths. But when it comes to the bodies of knowledge that these expeditions created, including culture-specific names and uses of plants that only the non-White expedition members could provide, credits are often missing.

Irrespective of time and place, all such contributions to what we can call more broadly consolidating national prosperity, should be unearthed. Karwafodi's work is but one example. His story, however, is particularly valuable for the methodological and theoretical lessons we can learn from it. To explore what made his legacy invisible and how his story converses with the current discourse on Indigenous people and their knowledge, I summarize his achievements, the many roles he took on in his life, and what he might have gained from these collaborations.

It is clear that Karwafodi met the expectations of academia. Perhaps most importantly, the part of his legacy that is known speaks volumes for his knowledge and continues to advance research. As linguists, we owe to him the first texts written down by a Lokono speaker, which offer us a wealth of primary

language data from the early twentieth century. As anthropologists, we are indebted to him for the most comprehensive sources on medicine men, the first autoethnographic study of his culture, and even museum objects that represent forms of Lokono culture, now threatened by cultural erosion. As botanists, we credit him for his contribution to the study of Surinamese flora, the written documentation of Lokono plant knowledge, and the now partly digitalized collections of neotropical flora, which continue to be used by researchers for identification and other research purposes. For the Lokono people, his work is of historic value as a contribution to the documentation of Lokono language and culture, and as an example of the often-overlooked role that the Lokono people played in colonial research.

While, like some of his collaborators, Karwafodi did not have an academic degree, he took on many of the roles that academia expects from its members. He showed a lifelong commitment to passing on his knowledge orally, as was the norm in his culture, but also in writing and despite geographic distance and the stigma of leprosy that marked his work with the Penards. He invented his own orthography, outdoing his peers in that respect. We can only imagine how the standardization of Lokono—an issue that the Lokono people have been struggling with for years—would have unfolded if his spelling had been adopted early on instead of outsiders inventing each their own way to represent Lokono (Rybka 2013). He was bilingual, conducted fieldwork, and used letters in his communications. The work he cocreated reveals a global exchange network, including Dutch and foreign experts. The paucity of women in this network is expected, as women only entered Dutch universities in the nineteenth century (Van Steen 2009). Besides Reinders-Gouwentak, it is worth highlighting the Curiel sisters who were charged with the task of photographing Stahel's work (Groeneveld 1991:35–36). We owe most of the images of Karwafodi to them.

The well-placed articles featuring his contributions offered Karwafodi exposure. One article even named "Sasamatit" [sic], the first time a Lokono man was named in the press in the context of science.[24] His collaborations with members of the upper class likely also impacted his social standing in Matta and allowed him to learn new skills. One news report notes the representative functions he performed in Matta in contacts with outsiders, and the apprenticeship that Stahel put him up for with the government's assistant consultant on agriculture.[25] It is from him that Karwafodi received seeds for his own experimental

24 *Het Vaderland: Staat- en letterkundig nieuwsblad*, 's-Gravenhage, March 20, 1926, Delpher, last accessed June 14, 2021: *West-Indische Gids*, p. 6.

25 "Onze tabakscultuur," *De Banier van Waarheid en Recht: Surinaamsch nieuws- en advertentieblad*, Paramaribo, October 3, 1934, p. 2; "Lelydorpnieuws," *De Surinamer: Nieuws- en*

plantation, which speaks to the potential his colleagues saw in him and his ability to harness their knowledge for his purposes. Finally, it is unlikely Karwafodi worked for free, but we might never know whether he was paid fairly. We do know that he was awarded the bronze medal of the Order of Nassau for his "long-lasting, faithful services to the Agricultural Experimental Station."[26]

Whatever his own motives were, however, they do not take away from the problem of how his work has been represented. After all, his collaborators likely had their own personal goals in mind when embarking to work with him. Yet, despite meeting the expectations of academia and the occasional acclaim his work gathered, Karwafodi was poorly credited for his work, which remained invisible to his descendants, the Lokono people, and even the experts who worked with this scientific legacy. We do not find any of his names in his collaborators' in memoriams,[27] modern publications on Indigenous plant names (Van 't Klooster, Lindeman & Jansen-Jacob 2003:16), Hoff's 1955 article on the history of research on Lokono in Suriname, nor the *Encyclopedie van Suriname*, even though the works he coproduced are discussed therein (Bruijning & Voorhoeve 1977). Van Kempen's overview of Surinamese literature is the only publication to note Karwafodi's input in the work by the Penard brothers, though it does not mention his contribution to the work authored by De Goeje and Abbenhuis discussed therein as well (Van Kempen 2002, 11:163–70).

Today, acknowledgement and authorship standards have changed, and some of the works Karwafodi cocreated, if republished, would have to be acknowledged more adequately. The work of another Lokono man mentioned here, Jonah Boyan, republished with Boyan as co-author "to give an even greater recognition to Boyan's contribution," can serve as one example (Fanshawe 1996:iii). In both cases, however, much of what we know about Indigenous contributions to science can only be deduced from notes on the sidelines of research: reports of scientific "discoveries" and archival materials such as field notes, correspondence, photographs, and herbarium collections. The current reconstruction points to where we must look to unearth the work of other Indigenous people. And while such sources are not new to anthropologists and historians, it is worth highlighting them for linguists, botanists, and other scientists working with the outputs of colonial research. Importantly, it is only

advertentieblad, Paramaribo, November 13, 1932, p. 2; "Naar Suriname," *De Koerier*, Bandoeng, August 7, 1929, p. 1. All from Delpher, last accessed June 14, 2021.

26 Author's own translation; "Onderscheiding," *De Surinamer: Nieuws- en advertentieblad*, Paramaribo, April 26, 1947, p. 1. Delpher, last accessed June 14, 2021.

27 For instance, *De West-Indische Gids* 1931; Haverschmidt 1949; Van Lier 1955; Oudschans Dentz 1937; Reyne 1955; Stafleu 198; Wellensiek 1954.

recently that newspaper, herbarium, and photographic collections have been digitized and can therefore be searched efficiently.

Karwafodi's work also raises the question of the representation of Indigenous people in modern academia. It is notable that his peers worked in several fields. By contrast, his knowledge was likely organized according to different principles and he might not even have been aware of disciplinary divisions and how they would affect the perception of his work in the future. Today, however, the combined effect of poor acknowledgement and epistemological differences is clear. While the work of his collaborators is linked across disciplines by their names—and those of their modern counterparts by the likes of ORCID identifiers—his work is fragmented not only by the many names he was given but also by the many disciplines into which his knowledge was channeled. But even if acknowledgment standards have changed, academic work continues for the most part along disciplinary lines. The role of disciplinarity itself in making Indigenous people, their knowledge, and efforts less visible than they ought to be should therefore be a point on the agendas of the recent shifts towards inter-, multi-, and transdisciplinary research. On this construal, the current interest in transcending disciplinary divisions offers opportunities to set new standards and recenter such work.

3 Conclusions

By way of closing up, I return to the proverb that Karwafodi taught us: *Awadoli afoda adeberotoh ada, tohmora ada ina khoro tohrokosa*, which I have translated as "The wind blows tall trees, but tree stumps it does not shake." In light of Karwafodi's work, we can see his collaborators—scholars familiar to those interested in the history of science in the colony—as the "tall trees." They are the scholars who reached the heights of academia and enjoyed its privileges. Indigenous men such as Karwafodi who laid the foundations for their careers—not merely by sharing their knowledge, but by actively contributing to research—are the overlooked "tree stumps." We can also read the proverb as a comment on knowledge production. The tall trees are then the secondary data that scientists build their careers on—the analyses of primary data, the tree stumps in this case, proffered by the Indigenous people. It is these works that later generations "shake": reanalyze, criticize, and build upon to further science. In this article, I reviewed colonial research outputs to refocus our attention on two types of tree stumps: Karwafodi, the invisible Indigenous man who cocreated colonial research, and the primary data he cocreated that continue to advance modern science.

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