

When a Wonder Is Not a Wonder: Swahili, Translation, and the Communication of Knowledge

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Abstract: Talking about the things we know is at once an everyday occurrence and an incredibly complicated process—the complexity of which, as historians of science have frequently demonstrated, can be a hindrance to the production and communication of knowledge. This essay frames this difficulty as a problem of translation. “Translation” here means two things: first, the interlinguistic process of moving ideas from one language to another; and, second, the intralinguistic question of whether knowledge can be turned into words at all, regardless of the languages in question. Paying attention to both dimensions of the translation problem, the essay explores various solutions proposed in and with the Swahili language during the colonial and postcolonial periods in Tanganyika/Tanzania. This context brings into stark relief the flows of power and authority that often determine which ways of speaking and knowing are accepted and which dismissed; it also brings to light translations that sometimes move against the expected current of power, as speakers and writers, both “expert” and “nonexpert,” simply went about the business of discussing the things they knew.

In the late 1940s James Gekonyo, a senior student at the renowned Alliance High School (situated just outside of Nairobi, Kenya), applied for entrance to Makerere University. Makerere, located in Kampala, Uganda, had been the premier institution of higher learning in East Africa since 1922, when it opened as a technical college; the school largely adhered to the British colonial ideology of “adapted education” until 1949, when Makerere began offering bachelor’s degrees through an agreement with the University of London. Gekonyo was, according to one of his teachers, “one of the ablest boys to whom I had taught Science at Alliance H.S.,” and he dreamed

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Acknowledgments. A huge thanks to the Editors at *Isis*, and in particular Projit Mukharji, for their patience in shepherding this piece into existence. Thanks also to the anonymous referees, who did much to strengthen it. A great deal of this essay was written while I enjoyed the time and intellectual freedom afforded by a research fellowship from the Alexander von Humboldt Foundation, for which I am very grateful.

Isis, volume 114, number 2, June 2023.

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of being a doctor. Despite the strong recommendations of his teachers, however, James Gekonyo's application was rejected by the Makerere Chemistry Department, and he had to settle—as it must have seemed to him—for a place in the Arts Faculty. A year or two later, Eric Lucas, one of Gekonyo's boosters from Alliance, had a chance to inquire about his student's application when a former Makerere chemistry professor came to stay at his home. The whole affair, it appeared, had turned on Gekonyo's entrance interview and "a silly answer he gave to the question: 'What is the difference between a solid, a liquid and a gas?'" The answer that had apparently "shocked" the chemists with its frivolousness was: "I can hold a solid in my hand and it will stay there; a liquid will run to the floor, and I cannot hold a gas at all." To Lucas, the answer did not seem "silly" at all but, rather, "showed some thought and imagination even." "What answer did you expect?" he asked his fellow educator. "Molecular structure read up in a textbook?"¹

Gekonyo's failure to gain entry to the Chemistry Department at Makerere offers an example at "ground level" of questions of much greater scope. In Gekonyo's case, the young scholar *knew*, quite clearly, the difference between the three physical states in question. The problem was that he had not communicated his knowledge in a way recognized by his assessors. Though Gekonyo was likely speaking English, or perhaps Swahili—language competencies that his evaluators would likely have shared—this was nevertheless a kind of translation problem. By "translation," I mean two things. First, there is the interlinguistic matter of moving messages from one language into another. But there is also an intralinguistic dimension of translation to be dealt with: that of turning knowledge into words at all, in any language. As a corollary to both dimensions must also be attached the theme of power: whether we are talking about which language holds more weight in a given situation (an interlinguistic question) or the privileging of a certain way of expressing concepts with words at all (an intralinguistic question), power and authority are always a part of the equation.

Taken in both of these senses—interlinguistic and intralinguistic—the literature in the history of science has demonstrated the multiple ways that translation can be a hindrance to the production and communication of knowledge, attending to the multiplicity of the barriers at issue: including between disciplines, fields, cultures, and languages.² Michael Gordin, for instance, explored nineteenth- and twentieth-century responses to the difficulties posed by "language friction" in the world of European scientific practitioners, chronicling everything from outright competition between metropolitan centers for scientific-linguistic primacy to the embrace of artificial, auxiliary languages (such as Volapuk, Esperanto, and Ido) as possible solutions. Gekonyo certainly experienced such friction, his failure to find the "right words" at first blush an example of the interlinguistic tension of being examined in a language that was not his mother tongue. But he also had to reckon with the second dimension of the translation problem—namely, that of how to translate phenomena in the world into the "right words," reflective of the particular epistemic paradigm of his examiners. This moves us toward the translational territory addressed by scholars such as Marwa Elshakry, who focuses on science and translation in the Arabic-speaking world. Elshakry, noting how historians of science have embraced language philosophy as a way

¹ Eric Lucas Handwritten Memoir, p. 2, Higher Education in Africa, MSS Afr. s.1825 (71), Box XL, Commonwealth and African Collections, Weston Library, Bodleian Libraries (BDL), Oxford.

² For translation across disciplines, fields, or practitioners see, e.g., Susan Leigh Star and James Griesemer, "Institutional Ecology, 'Translations,' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907–39," *Social Studies of Science*, 1989, 19:387–420; Peter Galison, *Image and Logic: A Material Culture of Microphysics* (Chicago: Univ. Chicago Press, 1997), esp. Ch. 9; Star, "This Is Not a Boundary Object: Reflections on the Origin of a Concept," *Science, Technology, and Human Values*, 2010, 35:601–617; and Pamela Long, "Trading Zones in Early Modern Europe," *Isis*, 2015, 106:840–847.

to explore the linkages between words and objects on both the ontological and the epistemological levels, explores moments of translation that put these connections in flux. She has also stressed the importance of understanding translation as a geopolitical practice, with particular translations—ways of expressing knowledge—more or less “utterable” or even “conceivable” in particular contexts.³ More and better attention is now being paid to the multiplicity of epistemologies present in any given time and place and to the historical violence done especially to indigenous (generally non-Euro-American) ways of knowing, finding, debating, and describing.⁴ In short: even if everyone speaks the same language, they might not be speaking the same “language.”

In the following episodes drawn from nineteenth- and twentieth-century Zanzibar and Tanganyika/Tanzania, I explore various translation problems—frictions that cropped up in the midst of projects including evangelization, standardization, and nation-building—and a multitude of proposed solutions. In the simplest terms, these translation cases involved Swahili as the target language and, generally, English as the source language. But the problems of translation rarely fell along such simple binary lines, and the solutions sometimes moved along unexpected vectors of both language and power. The history of these attempts at communication—what I refer to here, in its broadest possible sense, as translation—is thus at different times a story of oppression and emancipation, rigidity and creativity, misunderstanding and comprehension.

EAST AFRICA AND THE SWAHILI LANGUAGE

East Africa was and is a linguistic and epistemic multicultural, which makes it an advantageous theater in which to examine translation problems of every dimension. On the interlinguistic level, we have Swahili as one language among many—a language that was, by the mid-nineteenth century, a powerful regional force that extended inland to the Great Lakes and outward into the Indian Ocean. Meanwhile, the constraints and stark power imbalances of the colonial era, backed up against the mixture of possibility and limitation present in the early postcolonial period, offer illuminating contexts in which to ask how various actors approached both inter- and intralinguistic problems of translation.

First, though, to the main language in question: Swahili has a centuries-long history as a written language, and its presence in eastern Africa as a distinct spoken language likely stretches back more than twelve hundred years.⁵ Scholars have dated the earliest extant (though undoubtedly not the first) documents written in Swahili to the late seventeenth or early eighteenth century; their creators used the Arabic script or a modified form referred to as ‘Ajāmī.⁶ That is to say:

³ Michael Gordin, *Scientific Babel: How Science Was Done Before and After Global English* (Chicago: Univ. Chicago Press, 2015), p. 15; Marwa Elshakry, “Knowledge in Motion: The Cultural Politics of Modern Science Translations in Arabic,” *Isis*, 2008, 99:701–730, esp. pp. 702–703; and Elshakry, “Beyond a Singular History of Knowledge,” *Journal for the History of Knowledge*, 2020, 1(2), art. 6, p. 2.

⁴ Besides the work of Elshakry see, e.g., Paulin Hountondji, “Scientific Dependence in Africa Today,” *Research in African Literatures*, 1990, 21(3):5–15; Nancy Rose Hunt, *A Colonial Lexicon: Of Birth Ritual, Medicalization, and Mobility in Congo* (Durham, N.C.: Duke Univ. Press, 1999); Abena Dove Osseo-Asare, *Bitter Roots: The Search for Healing Plants in Africa* (Chicago: Univ. Chicago Press, 2014); Melissa Graboyes, *The Experiment Must Continue: Medical Research and Ethics in East Africa, 1940–2014* (Athens: Ohio Univ. Press, 2015); Joanna Radin, *Life on Ice: A History of New Uses for Cold Blood* (Chicago: Univ. Chicago Press, 2017); Clapperton Chakanetsa Mavhunga, *The Mobile Workshop: The Tsetse Fly and African Knowledge Production* (Cambridge, Mass.: MIT Press, 2018); Sabelo Ndlovu-Gatsheni, *Epistemic Freedom in Africa: Deprovincialization and Decolonization* (New York: Routledge, 2018); and Ndlovu-Gatsheni, “The Cognitive Empire, Politics of Knowledge, and African Intellectual Productions: Reflections on Struggles for Epistemic Freedom and Resurgence of Decolonisation in the Twenty-First Century,” *Third World Quarterly*, 2021, 42:882–901. For a challenging call from the discipline of classics see Dan-el Padilla Peralta, “Epistemicide: The Roman Case,” *Classica*, 2020, 33:151–186.

⁵ Derek Nurse and Thomas Hinnebusch, *Swahili and Sabaki: A Linguistic History* (Berkeley: Univ. California Press, 1993), pp. 1–2.

⁶ See, e.g., John Mugane, *The Story of Swahili* (Athens: Ohio Univ. Press, 2015), pp. 175–191; and Mugane, “The Odyssey of ‘Ajāmī and the Swahili People,” *Islamic Africa*, 2017, 8(1–2):193–216. ‘Ajāmī scripts have also been used to write West African

the creative, religious, legal, and political use of the Swahili language—written as well as oral—stretches back far beyond the arrival of European missionaries in the mid-nineteenth century. The narrative recounted here should therefore be understood as just one part of a much longer timeline of Swahili’s linguistic and intellectual history.⁷

In the nineteenth and early twentieth centuries, European academics became increasingly interested in the languages of Africa, elaborating theories about their supposed early level of linguistic development: some scholars hoped that the study of these languages, construed as “trapped in the historical present,” would lead to a better understanding of the origins and early development of their own.⁸ But upon their arrival in East Africa, three things became clear to European observers with linguistic inclinations: first, Swahili was a widespread lingua franca; second, the language had multiple dialects, but there were relatively high levels of mutual comprehensibility, as well as commonalities between Swahili and other Bantu languages; and, finally, Swahili had a well-developed written tradition in everything from poetry and prose to legal and personal composition. It therefore took impressive cognitive gymnastics to make the case that Swahili was an inferior language, low on the proverbial ladder of linguistic development (and thus “civilization”). The strategy deployed by many colonial-era linguists was to point to the number of words borrowed from Arabic and label Swahili a “creole” or, if a language, one whose development had been dependent on the higher civilization of Arab “conquerors”—a notion since thoroughly debunked by serious linguists.⁹ Nonetheless, armed either with this ideological explanation or with the simple recognition of the practical utility of Swahili, first missionaries and then colonial officials agreed that the language was “capable” of being their medium of communication, too, and determined to standardize a written version of it, in the Latin script.¹⁰

MIXED MESSAGES; OR, HOW TO TRANSLATE CHANGE

An important strand in that story begins in the 1860s, when the British members of the Universities’ Mission to Central Africa (UMCA) arrived on Zanzibar, determined to build a base from which they could evangelize between the coast and the Great Lakes. The mission enjoyed friendly relations with the Sultan of Zanzibar, in part because proselytizing among the islands’ Muslim population was largely excluded from their remit. Rather, the UMCA began taking in “liberated Africans”: those individuals enslaved on the mainland and transported into the Indian Ocean trade, some destined for the clove plantations of Zanzibar itself and others for markets further afield, who were either seized by the sultan’s forces for some customs infringement or, later, “rescued” by the Royal Navy after the 1873 closure of Zanzibar’s slave market.¹¹ For the

languages such as Hausa and Yoruba. See Fallou Ngom, *Muslims beyond the Arab World: The Odyssey of ‘Ajamī and the Murīdiyya* (New York: Oxford Univ. Press, 2016); and Coleman Donaldson, “The Role of Islam, Ajami Writings, and Educational Reform in Sulemana Kantè’s N’ko,” *African Studies Review*, 2020, 63:462–486.

⁷ For more on the history of Standard Swahili see Morgan Robinson, *A Language for the World: The Standardization of Swahili* (Athens: Ohio Univ. Press, 2022).

⁸ Sara Pugach, *Africa in Translation: A History of Colonial Linguistics in Germany and Beyond, 1814–1945* (Ann Arbor: Univ. Michigan Press, 2012), pp. 64–65.

⁹ Though Swahili does include lexical borrowings from Arabic, as well as from other languages both African and non-African, the linguists Derek Nurse and Thomas Hinnebusch have demonstrated that the bulk of these are relatively recent borrowings in set lexical arenas (e.g., religious terminology) and that Swahili has not borrowed words to a higher degree than, say, English. See Nurse and Hinnebusch, *Swahili and Sabaki* (cit. n. 5), pp. 314–331.

¹⁰ Though standardization would not become an actors’ category until the early twentieth century, nineteenth-century missionaries laid a foundation for codification—aided along the way by a host of East African interlocutors.

¹¹ See Matthew Hopper, *Slaves of One Master: Globalization and Slavery in Arabia in the Age of Empire* (New Haven, Conn.: Yale Univ. Press, 2015).

first two decades of its existence, these formerly enslaved individuals, mainly children, made up the bulk of the UMCA's congregation and student body.

Like missionary societies the world over, the members of the UMCA devoted a great deal of time and effort to language learning so that they could preach, teach, and translate the Bible. They sought to tackle an interlinguistic translation problem: with a message to convey and a preexisting set of linguistic competencies, the missionaries chose to translate into a language that they did not know and that was not the native language of their target audience. But the evangelist-linguists of the UMCA recognized the advantages offered by Swahili, with its wide reach and relatively small mother-tongue population. With such a “supraethnic” language, the missionaries believed that they could talk to almost everyone, without alienating anyone. Even the fact that Swahili had been used first to describe the concepts and figures of Islam did not bother one of the early and most influential of the UMCA priest-linguists, Edward Steere, who in fact regarded this as an advantage, a jump start on his own work of describing another monotheistic, Abrahamic religion. Steere and his colleagues thus committed their mission to Swahili and began learning it (with a focus on the dialect of Zanzibar) and teaching their students how to write it, slowly developing a Latin-script standard form through this piecemeal work. Besides school materials, biblical translations, and a great deal of other printed matter, by the turn of the century the UMCA had produced multiple editions of a *Handbook of the Swahili Language* and two dictionaries (English–Swahili and Swahili–English), these latter the work of the lay teacher A. C. Madan.¹²

Impressive output, to be sure. But how, exactly, had the European missionaries learned Swahili themselves? It quickly became clear that they would need the assistance of their target audience to create the very instrument with which they would convey the intended message. Among the UMCA's most important interlocutors were a distinguished *qadi* (Islamic jurist) and his friends, house servants and handworkers, and its own students, who arrived at the mission with varying degrees of previous exposure to Swahili. Missionaries and interlocutors worked together in painstaking projects of translation: words discussed with the *qadi* would be checked with the servants to be sure that his suggestions were “intelligible to the people,” then printed on the mission press into a school leaflet, where the reaction and understanding of the students would send the missionaries either back to the drawing board or on to the next page.¹³

At the same time as the missionaries got better and better at Swahili, creeping closer to a shared medium of communication with their students, the students themselves were actively changing their own language repertoire, responding to the diversity of linguistic influences that came together on Zanzibar. One of my favorite examples is the word “*kuchenja*.” As reported by Rev. Lewin Pennell, who taught at the UMCA high school on Zanzibar in the early 1870s, “One sees from these boys how easily they adopt words from other languages: for instance ‘*kuchenja*,’ which began in play, is almost as often used as ‘*badili*.’”¹⁴ The hybrid word “*kuchenja*” consists of the Swahili verb marker “*ku-*” and a modified version of the English verb “to change.” Used by some students in place of the Swahili verb “*kubadili*,” the construction of “*kuchenja*” demonstrates a linguistic flexibility and creativity that, in this case, served the purpose of communication. “*Kuchenja*” was a solution to an interlinguistic problem, a solution that was neither

¹² Edward Steere, *A Handbook of the Swahili Language as Spoken at Zanzibar* (London: Bell & Daldy, 1870), 2nd ed. (London: George, 1875), 3rd ed., rev. and enlarged by A. C. Madan (London: Society for Promoting Christian Knowledge, 1884); Madan, *English–Swahili Dictionary* (Oxford: Clarendon, 1894); and Madan, *Swahili–English Dictionary* (Oxford: Clarendon, 1903).

¹³ Lewin Pennell to Edward Steere, 21 Sept. [no year], UMCA Box List A–F: A1(III)C, BDL.

¹⁴ Pennell to Steere, 22 May [no year], *ibid*.

proposed nor controlled by the mission linguists, demonstrating that translation was rarely as simple as moving between a source and a target language—both of which were perpetually in flux.

DEVELOPMENT AND DICTIONARIES: THE GERM OF “KIJIDUDU”

By the 1920s, as Britain began to consolidate the colonial administration of its post–World War I mandated territory of Tanganyika, translation had become a high-level political question. The publications of the Universities’ Mission were now studied not just by other missionary societies across the region but also by British colonial officials.¹⁵ And when those officials sat together with missionaries and other interested observers in Dar es Salaam in 1925 for the purpose, *inter alia*, of determining the administrative language of Tanganyika, among their first resolutions was to adopt Steere’s *Handbook* and Madan’s dictionaries as the basis of what would now carry the label “Standard Swahili.”

The colonial administration formed an official body, the Inter-Territorial Language Committee (ILC), whose scope included the standardization of a written version of Swahili to be used in schools and administration across all four of Britain’s East African territories (Tanganyika, Kenya, Uganda, and Zanzibar). The members of the committee perceived their task as a mainly inter-linguistic process of translation: in this case, the translation of Swahili from its missionary standard into a “developed” language. The members of the ILC carried out their work in an interwar milieu in which the notion of development superseded that of the “civilizing mission,” thereby implicitly (and sometimes explicitly) linking their task to the widely held faith in science and technology’s perpetual advancement into the future—processes that would, it was understood, be shepherded by the colonial state and only allotted to colonial subjects as quickly as they showed themselves “ready” for “progress.”

Some observers believed the committee’s task to be quixotic, questioning whether Swahili could “handle” sophisticated concepts from law, science, or governance—a notion made laughable by the language’s long history of religious, philosophical, poetic, and other literatures, both spoken and written, and one that even the most paternalistic of the committee members dismissed out of hand. The linguists of the ILC, amateur and academic alike, did, however, approach their task as that of translation from the top down, not only hoping to establish a uniform way of writing the language in the Latin script but also taking it upon themselves to introduce to Swahili what they saw as the vocabulary of “science.” And this “development” of the language was a process that, in the official imagination, would be directed by Europeans for a long time to come. Indeed, as mentioned above, British colonial assessments of Swahili’s “suitability” for expressing various concepts often aligned with evaluations of the population’s “readiness” to participate—in its own education, its own governance, and its own research. As the 1942 ILC *Bulletin* phrased it:

Whether Swahili can become the vehicle of scientific thought has frequently been questioned, but it does not at all follow that as a language Swahili is unsuited for this purpose or that it does not possess adequate means of development to meet the time when the general level of education has reached the necessary height when the sons of Africa

¹⁵ Even the Germans—who similarly though less wholeheartedly adopted Swahili as their administrative language in mainland German East Africa before losing their colonial territories after World War I—utilized Steere’s orthography, despite fears in some quarters that the Zanzibar dialect was too closely tied to Islam. For an in-depth view of the links between German colonialism and the academic study of *Afrikanistik* see Pugach, *Africa in Translation* (cit. n. 8). For an examination of this discussion as it continued into the interwar years see Emma Hunter, “Language, Empire, and the World: Karl Roehl and the History of the Swahili Bible in East Africa,” *Journal of Imperial and Commonwealth History*, 2013, 41:600–616.

themselves will produce an adequate scientific literature . . . giving them a chance to see something of the contribution which they may make towards the evolution of world progress.¹⁶

Notice the temporal and subjunctive markers here: “can become,” “will produce,” “may make.” Swahili, in this view, *was* capable of expressing scientific knowledge—only not yet. The paternalistic racism of the civilizing mission patently carried over into the colonial developmentalist mentality, as people and their languages were placed along a spectrum of progress that was decided on, and along which any movement was to be steered by, the European “trustee.”¹⁷ This worldview was central to the work of the ILC in colonial East Africa: it was, until 1939 and functionally through World War II, an all-European affair, an effort to exert control over the way that people learned, wrote, and interacted with government.

But the ILC’s work also fit somewhat uncomfortably within the expectation of incremental, European-controlled “progress.” The members of the committee were acutely aware that languages are constantly changing, a significant stumbling block for the task of standardization. And in the face of such perpetual change, ILC officials were forced to acknowledge—despite their status as representatives of the colonial power—their reliance on the help of East African speakers and writers of Swahili. Let us look briefly at two examples that demonstrate this tangle of ideological and pragmatic interests and their effects on translation.

The committee began its work in 1930, and its first major project was the production of three dictionaries: English–Swahili and Swahili–English (revisions of Madan’s) and a from-scratch Swahili–Swahili dictionary. This set the committee’s first lexical deadline—the Swahili contained within the dictionaries, all agreed, needed to be up to date, including in its scientific vocabulary. To that end, the ILC’s journal (called the *Bulletin* until June 1954) regularly printed word lists and solicited comments and corrections to them. “Suggestions for the following are requested,” announced, for instance, issue number 8 in May 1935: “1. A comprehensive term is required for a germ or microbe. At present ‘germ’ is used, but it is not a word which can be satisfactorily Bantuised. Basili, mikrobi, have been suggested.” “Bantuization” referred to the ILC’s most common strategy of word coinage, that of borrowing words (generally from English) and, for example, adding a final vowel to imitate Swahili pronunciation or adding a prefix to fit the word into one of the language’s nine noun classes. It took nearly a year to reach resolution on this particular lexical decision: “*GERM or MICROBE*. The Committee recommends that the most suitable word for use as a comprehensive term for germ and microbe is *kijidudu*, plural *vijidudu*”—meaning, literally, “very small insect.” The *Bulletin* also printed lists of agricultural terms, mathematical terms, vocabulary for weights and measurements, psychological concepts, and words from many other fields besides. One set of terms would supersede earlier ones until—as in 1944 with regard to psychology—enough consensus among readers was reached: “It was noted with appreciation that the list had found almost universal acceptance and it was decided that the list as printed on pages 7, 8, 9, 10, and 11 of the Committee Bulletin No. 17, October 1943, should be accepted as standardized forms.”¹⁸

¹⁶ Inter-Territorial Language Committee, *Bulletin*, no. 16 (Oct. 1942), p. 6, School of Oriental and African Studies (SOAS) Library, University of London.

¹⁷ See, e.g., Peter Dumbuya, *Tanganyika under International Mandate, 1919–1946* (Lanham, Md.: Univ. Press America, 1995); and Michael Callahan, *Mandates and Empire: The League of Nations and Africa, 1914–1931* (Portland, Ore.: Sussex Academic, 1999). For the post–World War II story see Frederick Cooper, *Africa since 1940: The Past of the Present*, 2nd ed. (New York: Cambridge Univ. Press, 2019).

¹⁸ Inter-Territorial Language Committee, *Bulletin*, no. 8 (May 1935), p. 15 (initial query regarding “germ”); no. 10 (Apr. 1936), p. 1 (resolution); and no. 18 (Nov. 1944), p. 7 (acceptance of psychology terms): SOAS Library.

As the sociolinguist Jan Blommaert argued, word coinage has historically been anything but a straightforward linguistic matter. Any evaluation of Swahili's capacity to facilitate scientific communication was rooted in the aforementioned colonialist ideology of development, "in which an African language was evaluated against the standards of the 'civilisation' of its speakers." And the most common scale used to evaluate a language's level of development was, for all practical purposes, a lexical one. "Vocabulary expansion," Blommaert contended for both the colonial and postcolonial periods, "came to stand for the total state of the Swahili language" and therefore, by extension, for the entire state of knowledge in Swahili.¹⁹ In fact, lexicology had long been a preoccupation of philosopher-scientists and scientist-linguists, in Europe as well as East Africa.²⁰ But word coinage, Blommaert convincingly insisted, becomes problematic when associated with a concept such as "development" or "modernization"; he argued that the process largely consisted of "translating already existing (mainly English) terminology. Thus, modernization, in its word-coining reality, has a clear implication of deficit: nothing is really invented, inventions from elsewhere are simply translated. . . . English would always be the source language, in which new terms are introduced first. It would therefore always seem superior, and the modernization of Swahili would seem a never-ending and hardly gratifying process."²¹

The lexicographic work of the ILC was steeped in just such theories of development, and word coinage against an English scale of measurement could, seemingly, go on forever. Yet, as confident as the committee's European members were in their own expertise, even they realized that their judgment regarding any single Swahili word was anything but final. In 1942, for instance, a Catholic priest-teacher living in Bagamoyo, Tanganyika, submitted a memorandum on "Arithmetical Terminology" to the committee. "From experience of teachers in Arithmetic in schools where Swahili is used as a medium," wrote Father Alfons Loogman, "it would appear that the terminology introduced and approved by the Inter-territorial Language Committee is in many cases far from satisfactory." Rather than leaving revision to the committee alone, Loogman instead proposed: "It may be useful therefore to invite those teachers to bring together their suggestions, so that the best list of terms may be compiled and adopted."²² On one hand, Loogman's memo suggests that he, and by extension his colleagues in the ILC, needed help (though he did not hesitate to prepare a list of suggested terms). The proposed meeting of math teachers from Swahili-medium schools around the region would have included some Europeans, but also East Africans who filled teaching posts at both government and missionary schools. Reaching out to the diversity of teachers in the territory was a recognition that, no matter what was printed in the dictionaries, practitioners were already making themselves understood—doing the work of translation—every day and that the committee needed to consider these articulations for its own work.

But the commitment to broad-based input only went so far: two years before his mathematical memo, Loogman had written to the *Bulletin* on the topic of vowel coalescence in Swahili. "Generally speaking," he began, "a scientific study of any language requires readiness to accept it as it lives in the conversation and the writings of the people. Our aim in such a study is to discover its rules allowing for exceptions; not to make any rules a priori." Here openness and communication

¹⁹ Jan Blommaert, *State Ideology and Language in Tanzania*, 2nd rev. ed. (Edinburgh: Edinburgh Univ. Press, 2014), pp. 71, 87.

²⁰ See, e.g., Gordin, *Scientific Babel* (cit. n. 3), Ch. 3.

²¹ Blommaert, *State Ideology and Language in Tanzania* (cit. n. 19), p. 74.

²² Inter-Territorial Language Committee (1942), "Agenda and Minutes of the Second Meeting of the Inter-Territorial Language (Swahili) Committee Readers and Assistant Readers, 26th and 27th of January 1942," Appendix VIII, Memorandum on "Arithmetical Terminology" by the Rev. Fr. Loogman, CO 822/108/25, British National Archives, Kew. Loogman would later become a professor of Swahili at Duquesne University in Pittsburgh, Pennsylvania.

took center stage. Yet the codification of a language, he stressed, requires “unification” and therefore the raising of a particular dialect to the status of “the” standard, an inherently exclusionary process. But the designated standard must also, Loogman continued, incorporate features from nonstandard dialects; in this sense “unification can and must be inclusive.”²³ Loogman’s several about-faces capture the complex, at times contradictory, perspectives held by the official standardizers of the British colonial period on the question of translation and its possibilities.

Along with word coinage and dictionary creation—proposed solutions to the supposed interlinguistic problem of “developing” Swahili—the linguists of the ILC occasionally ruminated on the intralinguistic dimension of translation, confronted by the fact that not only is *language* a moving target but so, too, is *knowledge*. And as knowledge changes, so must the words with which one speaks about it, no matter the language. Gerald Broomfield, a member of the committee and longtime missionary on Zanzibar, acknowledged this tension in a contribution to the *Bulletin*, expressing bemusement about certain critiques of the ILC’s work, in particular the criticism of the committee’s lexical additions to Standard Swahili. His meditation is worth quoting at length:

No living language in the history of the world has ever ceased to change and develop, and none ever will until two conditions are present. All those using a language would have to be accustomed to speak and write exactly the same form of that language, and also to read the same literature, which itself would have to be completely uniform in idiom, phrase, style and vocabulary. Secondly, it would be necessary for all mental development, and all advance in knowledge, to cease entirely. Language changes most rapidly in one way when there is little or no standard literature, and people do not read. It changes in another way when new knowledge is acquired and new systems of philosophy are elaborated. At the present time, the English in common use is changing slowly, more slowly than it ever has, because there is a vast amount of general literature and practically everybody reads. It is literature, and literature only, that stabilizes language. But technical English, the English of scholars and scientists (using “science” in the broadest sense) is changing very rapidly indeed. Every advance in knowledge, and every advance in systematic thought, necessitates change and development in the language which is to be the vehicle, and means of expression, of that knowledge and philosophy. Whether we like it or not, Swahili is bound to change and develop rapidly for both these reasons.²⁴

As Broomfield’s reflections make clear, he and his colleagues on the committee understood that knowledge was a constantly moving target with which linguists and scientists alike had to reckon, demanding ever-changing translations.²⁵ But, as bureaucrats, they proceeded with their work using an ideological crutch, claiming that Swahili itself—its “underdevelopment” along their own defined lines—was the problem. Moreover, the question of linguistic and epistemic *capacity* was only ever asked of non-European languages and their speakers. It was only in the independence era that translation problems and their solutions began to be framed differently, as Swahili became a central tool of the anti-colonial and, later, nation-building movements in Tanganyika/Tanzania.

²³ Inter-Territorial Language Committee, *Bulletin*, no. 14 (Sept. 1940), p. 15, SOAS Library.

²⁴ Inter-Territorial Language Committee, *Bulletin*, no. 7 (Jan. 1934), p. 14, SOAS Library.

²⁵ Broomfield’s remarks also describe a very particular, linear notion of scientific “advance.”

TRANSLATING INDEPENDENCE, OR “AJABU SI AJABU!”

Swahili was central to the politics of Julius Nyerere, Tanzania’s first president and leader of its nationalist party, the Tanganyika African National Union (TANU). He proudly reported, for instance, that on his political tours around the country, rallying support for the party and its cause, he only twice (or perhaps thrice) needed an interpreter.²⁶ Swahili, for decades the language of colonial administration, had revealed itself to be the archetypal double-edged sword: once used to create clerks and colonial subjects, by the 1950s it began to be used to call for the ouster of the British regime. Following the independence of Tanganyika in 1961 and the union between Tanganyika and Zanzibar to create the Republic of Tanzania in 1964, the language transitioned from an anti-colonial rallying point to a nation-building symbol and, quickly thereafter, an effective administrative tool. In this period, starting in the mid-1950s and running through the 1970s, speakers of Swahili in Tanzania began improvising with translations of their own, trying to address frictions both inter- and intralinguistic.

At the official, governmental level, there was still much time devoted to terminological “development,” though the work was framed quite differently than it had been during the colonial period. Nyerere and his political colleagues explicitly bound the language within the philosophy of *Ujamaa* and its concomitant idea of *kujitegemea* (self-reliance).²⁷ *Ujamaa*, which literally means “familyhood” but is often associated with the idea of “African socialism,” was the ideological and practical basis of Tanzanian governance for over two decades after independence. And according to Blommaert, despite “the vagueness surrounding the concept of culture in *Ujamaa*, the role of language was clear enough. In fact, language was the only issue on which absolute clarity reigned: the connection between the new nation and its new language, Swahili, was a fixed trope that was never challenged.”²⁸ Swahili was “new” in the sense of its clear postcolonial association with independent Tanzania—it became Tanzania’s national language, more definitively even than in the neighboring countries of Kenya and Uganda, where the language played (and plays) an important if more ambiguous role in social and political life.²⁹

During the independence period, the ILC and its engagement with both the Swahili language and the Tanzanian state changed accordingly; it moved to the University of Dar es Salaam in 1964 and finally, in 1972, became the Institute of Kiswahili Research (Taasisi ya Uchunguzi wa Kiswahili, or TUKI).³⁰ As Blommaert explained, “TUKI was assigned a scientific task—that of proposing all kinds of linguistic measures to improve the standards of Swahili and enhance its spread and absorption by the people.” TUKI was joined by the National Swahili Council (Baraza la Kiswahili la Taifa, or BAKITA), which oversaw official language policy, and by the National Swahili Council of Zanzibar (Baraza la Kiswahili la Zanzibar, or BAKIZA). “Together,” Blommaert wrote, “TUKI and BAKITA formed the scientific instrument by means of which Tanzanian state government was going to back up its political decision to make Swahili the language of all Tanzanians.”³¹ And what, concretely, was the shape of the “science” practiced by these

²⁶ See Wilfred Whiteley, *Swahili: The Rise of a National Language* (London: Methuen, 1969), p. 65; and John Iliffe, *A Modern History of Tanganyika* (New York: Cambridge Univ. Press, 1979), p. 530.

²⁷ Nyerere emphasized, for instance, “*elimu ya kujitegemea*” (“education for self-reliance”). I need to read more widely for potential connections between language and science in Tanzania’s postcolonial education policies, as Abena Dove Osseo-Asare describes in “Scientific Equity: Experiments in Laboratory Education in Ghana,” *Isis*, 2013, 104:713–741; and *Atomic Junction: Nuclear Power in Africa after Independence* (New York: Cambridge Univ. Press, 2019).

²⁸ Blommaert, *State Ideology and Language in Tanzania* (cit. n. 19), p. 41.

²⁹ One should not, however, overstate Swahili’s ubiquity in Tanzania. There were many communities speaking other languages, exhibiting more or less familiarity with any dialect of Swahili, including its standard variety. TANU’s concerted literacy drives of the 1960s and 1970s underline this fact.

³⁰ Today it is the Institute of Kiswahili Studies.

³¹ Blommaert, *State Ideology and Language in Tanzania* (cit. n. 19), p. 52.

institutions?³² As with the ILC, word coinage received heavy emphasis. While TUKI focused on academically oriented linguistic research, BAKITA at the outset emphasized lexical expansion, publishing “*Tafsiri Sanifu*” (“Standard Translations”) that promulgated terminology lists for specific subjects from governance to engineering. When the political steam of Swahilization faded in the late 1980s and BAKITA found itself lacking support from government, TUKI took up the mantle, producing a series of subject dictionaries in the 1990s.³³ The standard dictionaries were also revised in the latter half of the twentieth century, prepared by the institute and appearing in 1981 (*Kamusi ya Kiswahili Sanifu*), 1996 (*English–Swahili*), and 2001 (*Kiswahili–Kiingereza*).

The colonial-era language ideologies linking lexical expansion to sociopolitical or economic development were not, however, simply adopted wholesale but, rather, inflected through the politico-linguistic context of the newly independent state. In order to make Swahili central to Tanzanian nation-building, Nyerere and TANU painted it as at once a language of great local historical tradition and the language from which a “modern” nation-state, recognized on the global stage, could grow.³⁴ This was part of a broader attempt, as the anthropologist Kelly Askew has described it, to create “social and cultural unification” by “recuperating” the diverse traditions of the various groups now counted as countrymen and countrywomen and incorporate these into a national culture—the systematic construction of a multifaceted “homogenization.” In Nyerere’s words, as he announced the establishment of a Ministry of National Culture and Youth in 1962:

A country which lacks its own culture is no more than a collection of people without the spirit which makes them a nation. Of all the crimes of colonialism there is none worse than the attempt to make us believe we had no indigenous culture of our own; or that what we did have was worthless. . . . So I have set up this new Ministry to help us regain our pride in our own culture. I want it to seek out the best of the traditions and customs of all the tribes and make them part of our national culture.

For Nyerere, tradition and custom implied neither stagnation nor opposition to change. Rather, elements of “tradition” would be chosen to serve as building blocks for Tanzania’s future cultural, social, political, and economic structures. Nor did this foundation of tradition, in Nyerere’s vision, entail a rejection of all outside influence; again, in his own words: “I don’t want anybody to imagine that to revive our own culture means at the same time to reject that of any other country. A nation which refuses to learn from foreign cultures is nothing but a nation of idiots and lunatics.”³⁵

This ideal of a national culture built on the diverse traditions of the territory and the best ideas from outside formed a potent model in the early postcolonial decades.³⁶ And while the

³² See the dissertation by George Aggrey Were-Mwaro for an in-depth examination of the work (including achievements and shortcomings) done by these institutions and their Kenyan counterparts in developing “scientific” terminology for linguistics in Swahili: G. A. Were-Mwaro, “Usayansi wa Istitlahi za Isimu ya Kiswahili” (The Science of Swahili Linguistic Terminology) (Ph.D. diss., Egerton Univ., Kenya, 2000).

³³ Karsten Legère, “Formal and Informal Development of the Swahili Language: Focus on Tanzania,” in *Selected Proceedings of the Thirty-Sixth Annual Conference on African Linguistics*, ed. Olaoba Arasanyin and Michael Pemberton (Somerville, Mass.: Cascadilla Proceedings Project, 2006), pp. 176–184, esp. pp. 176–177, 179.

³⁴ Blommaert, *State Ideology and Language in Tanzania* (cit. n. 19), pp. 78–84.

³⁵ Kelly Askew, *Performing the Nation: Swahili Music and Cultural Politics in Tanzania* (Chicago: Univ. Chicago Press, 2002), p. 13; she quotes Nyerere on pp. 13, 191.

³⁶ Much of Tanzania’s cultural borrowing initially came through Pan-Africanist and socialist connections rather than former colonial ones.

bureaucratization of cultural production met with mixed success, the model of unity-out-of-diversity as applied to the Swahili language reinforced its usefulness as both a symbol and a tool. It was in fact a remarkable achievement of the postcolonial government: in the face of such great and acknowledged social, cultural, and linguistic diversity, how was it that Swahili could become the most successful “element that so forcefully symbolizes Tanzanian national unity, a unity that, in this domain, even supersedes mainland-island distinctions and provides rhetorical justification for the Union”?³⁷ It necessitated a certain level of agility in translation, and many linguists and other language specialists in Tanzania adopted the cultural nationalists’ approach of trying to build unity out of diversity. This did not necessarily mean an extensive incorporation of multiple Swahili dialects or other Tanzanian languages into Standard Swahili: the dialects had been there all along as an influence, and Swahili was unquestionably chosen to play the role of national language. Rather, Tanzania’s postcolonial linguists continued to regard translation as an ongoing process of communication, reflection, and reformulation, this time led by representatives of an independent rather than a colonial government. And alongside, in between, and sometimes in spite of official projects of translation, Swahili speakers across East Africa did what they had always done, translating their knowledge in ways that were sometimes in sync, sometimes out of sync, with the official ideology.

In 1960, Tanganyika was on the cusp of independence, and the newspaper *Mambo Leo* (outlet of the exiting British administration) brimmed with hope and advice for the future. This included a deep interest in global technological developments, which were followed closely in a semi-regular column called “Maajabu ya Sayansi!” (“The Wonders of Science!”). The articles consisted mainly of descriptions of new technologies, from the Comet IV airplane that stopped over in Dar es Salaam, to an American helicopter, to a deep-water submersible.³⁸ And the author or authors of the articles unselfconsciously used Swahili to talk about these scientific and technological concepts, demonstrating that this interlinguistic translation problem was no longer (perhaps never had been?) an insurmountable one. But the February 1960 issue of the column took a step into intralinguistic territory with the declaration: “Ajabu si Ajabu! Asili ikawa ya kwanza, pili watu wa sayansi” (“A wonder is not a wonder! Nature was first, second the scientists”).³⁹ “Many times,” the article began, “people think about a discovery and say: it is a wonder, how did the experts of ‘science’ think of it? The truth is that often those same expert scientists imitated nature: and nature still shows us miracles that astonish the scientific experts. And often nature is able to do some things better than those experts are able to do them.”⁴⁰ The article went on to compare technological innovations to things found in the natural world: assimilating the flight patterns of geese, the wings of birds, and the fins of fish with the physics of airplane flight; noting the “radar” of bats; or likening the stripes of the zebra to the camouflage used by army transports. In case after case, the article’s author emphasized, nature paved the way. So, while “elimu ya

³⁷ Askew, *Performing the Nation* (cit. n. 35), p. 184. Whenever referencing Tanzanian “national unity,” one must acknowledge the intense, ongoing friction between the mainland and island territories, which arose from the very first days of the *Muungano* (Union) between Tanganyika and Zanzibar in 1964.

³⁸ *Mambo Leo*, Mar. 1960, p. 12; Apr. 1960, p. 11; and May 1960, p. 19.

³⁹ *Mambo Leo*, Feb. 1960, pp. 7–8 (here and throughout this essay, translations into English are mine unless otherwise indicated). The word “*asili*” connotes “origin,” “fundamental principle,” “essence,” “root,” or “inborn character,” lending it a more comprehensive meaning than that encompassed by the common use of the English term “nature” to mean “the natural world.”

⁴⁰ “Mara nyingi watu hufikiri juu ya uvumbuzi na kusema: ni ajabu, namna gani wataalamu wa ‘science’ walifikiriye? Ukweli ni kwamba mara nyingi vile vile wataalamu wa sayansi hao walifuatisha asili: na asili bado inatuonyesha miujiza ambayo inawastaajabisha wataalamu wa sayansi. Na asili mara nyingi inaweza kufanya mambo mengine vizuri zaidi kuliko wawezavyo wataalamu hao.” *Ibid.*, p. 7.

sayansi inaweza kuwa na kustajabisha” (“scientific education has the ability to amaze”), the piece argued that such wonders were not the sole domain of academic science.⁴¹

Mambo Leo’s editors, contributors, and readers were obviously interested in the kind of technological innovation that required dedicated governmental support—and lots of money. But with “Ajabu si Ajabu!” they made room, too, for other ways of observing, knowing, and communicating scientific and technical knowledge, addressing the intralinguistic dimension of translation. And while such “naturalistic” metaphors were also a part of the repertoire of colonial epistemic norm enforcement—distinguishing between various abilities to “comprehend” scientific knowledge while insisting on the supremacy of the metropole’s science and technology—the article catches the eye because of its sharp contrast to the out-of-hand dismissal, just over a decade before, of James Gekonyo’s apparently inappropriately “homespun” way of expressing his own knowledge about physical states.⁴² Moreover, in “Ajabu si Ajabu!”—and I think this is an important distinction—the column’s author was explicitly *not* intent on translating the “universal” discoveries of scientists and engineers into familiar flora and fauna; he or she was, rather, arguing that the local came *first*, that the empirical keys to scientific wonders that resonated around the world were already held, and could already be expressed, at home.

But I do not want to leave the reader with the impression that, with the political independence of Tanzania, Swahili was finally able to exercise its purely emancipatory influence on the solution of translation problems; things were never that straightforward, and the paths of communication sometimes took very different directions. The work of Joshua Grace, whose dissertation focused on car mechanics at state-run as well as unlicensed garages in Tanzania, offers a beautiful example of just such a surprising improvisation. Grace’s research uncovered processes of both literal and figurative “tinkering” as (mostly) young men “staked their reputations upon the superiority of their ‘hand expertise’ (*utaalum wa mikono*) and creativity (*ubunifu*) over what they termed the ‘book expertise’ (*utaalum wa vitabu*) of international and state-trained mechanics.” The tinkering of Tanzanian car mechanics included, naturally, linguistic experimentation—finding ways to communicate in order to get on with the work. While the state attempted in the 1960s and 1970s to standardize Swahili equivalents for automobile terminology, the mechanics had already become quite comfortable talking about cars using English terms. Describing the attempted “vernacularization of vehicles” in an evening trade course in the 1970s, one of Grace’s interlocutors remembered:

No, none of us knew English, but we always used the English names for cars and parts. I mean, what type of mechanic goes to the parts store and describes a part in Swahili? That’s ridiculous. So in classes, it was very funny. The instructors had these books and must have been told they had to teach us the Swahili names for parts, but none of us had ever used those words at work. I can’t even remember what they were. None of us actually spoke English, but we had to ask the instructor to use the English terms because we didn’t understand what the Swahili words he used meant.⁴³

Borrowing from English directly into Swahili, sometimes with slight morphological adaptations, had been, as we’ve seen, a common form of lexical expansion in East Africa; colonial linguists

⁴¹ *Ibid.*, p. 8.

⁴² Many thanks to the referee who noted this tension in my interpretation of the article, pointing to the ways in which “natural” metaphors could be used to reinforce epistemic hierarchies.

⁴³ Joshua Grace, “Modernization *Bubu*: Cars, Roads, and the Politics of Development in Tanzania, 1870s–1980s” (Ph.D. diss., Michigan State Univ., 2013), pp. 2–3, 222. I am very much looking forward to getting my hands on the book: Grace, *African Motors: Technology, Gender, and the History of Development* (Durham, N.C.: Duke Univ. Press, 2021).

certainly used this technique, while here we have Tanzanian car mechanics using English to express their own hard-won expertise. And to insist that they use unfamiliar Swahili terms to express knowledge with which they were intimately familiar is akin to—and, as it turns out, just as futile as—the attempts of the colonial state to get math teachers to use terminology that their students did not understand.

Such fluidity, not least because of its rather effective facilitation of communication, could only reverberate back up the chain into the official imagination. Take, for instance, Rajmund Ohly's *Primary Technical Dictionary, English–Swahili*, published in 1987. Ohly was a Polish linguist who taught at the University of Dar es Salaam. The dictionary was published by BAKITA with cooperation from the Institute for Production Innovation, which was also housed at the university. The foreword to Ohly's technical dictionary was written by Ali Hassan Mwinyi, Tanzania's second president. Mwinyi inherited leadership of the country in shifting circumstances, eventually moving it toward policies of economic liberalization and multiparty democracy (with decidedly weak opposition parties)—as well as a decreased emphasis on Swahili in favor of English.⁴⁴ In his foreword to the *Technical Dictionary*, however, Mwinyi wrote: "I anticipate that this dictionary will be relevant and useful to technocrats, especially scientists and engineers, who may feel the communication gap between themselves and their target audience. It is also my hope that it will minimise this communication barrier and enhance a reciprocating contact and exchange of ideas, experience and knowledge between technocrats and non-technocrats." In the next breath, however, he tempered his readers' hopes, noting, "This dictionary may not initially meet all basic technocratic requirements. However, I hope that it will continue to entertain necessary amendments and revision from time to time so as to progressively provide better and more refined versions." Ohly, the dictionary's compiler, was also frank about the provisional nature of his publication, writing in the introduction:

The lack of basic terms in some technical fields and the existence of terms from highly developed technical branches are the main characteristics of the vocabulary of the present technical generation. In the first case, the user may be encouraged to contribute to the development of terminologies by introducing his own terms and recording them in the empty ruled space for subsequent use. This space may also be used for recording terms agreed upon and popularized after the compilation of this *Dictionary*, i.e. after 1987.⁴⁵

The dictionary was printed exactly as Ohly described, with each page comprising three columns: an English term on the left, a Swahili equivalent in the middle, and a column of blank lines all along the right-hand side of the page, corresponding with each entry, so that the user could update his or her dictionary as either their own personal or general technical knowledge or language changed.⁴⁶ Ohly even included an appendix titled "Directions for Coinage in Swahili," in which were outlined general guidelines for the creation of new technical terms in Swahili. The dictionary thus explicitly gave its users the tools with which to make new translations, adjusting to transformations in either language or knowledge.

⁴⁴ See Meg Arenberg, "Ulimi Huiba (The Tongue Steals): Genre, Intertextuality, and Identity-Making in Tanzanian Literature" (Ph.D. diss., Indiana Univ., 2016), p. 221; and Blommaert, *State Ideology and Language in Tanzania* (cit. n. 19), pp. 59–60.

⁴⁵ Ali Hassan Mwinyi, "Foreword," in Rajmund Ohly, *Primary Technical Dictionary, English–Swahili* (Dar es Salaam: Institute of Production Innovation, Univ. Dar es Salaam, 1987), p. 0; and Ohly, "Introduction," *ibid.*, p. ii.

⁴⁶ The internal copies of the ILC dictionaries were similarly printed in interleaved style so that additions could be made for future revisions. Inter-Territorial Language Committee (1942), "Agenda and Minutes of the Second Meeting of the Inter-Territorial Language (Swahili) Committee Readers and Assistant Readers, 26th and 27th of January 1942" (cit. n. 22), p. 2.

Improvisation in translation has been raised to the level of an art, meanwhile, in the case of Sheng—a language spoken in Kenya that samples from Kenyan Swahili, English, and a host of local languages. Long regarded as an “improper” register used by young people in Nairobi, Sheng has rapidly become one of the country’s multiple vernacular languages, used in daily interactions by a diversity of Kenyans, as well as in music, advertising, and even political discourse.⁴⁷ Sheng speakers who pointedly avoid *Kiswahili Kisanifu* (Standard Swahili) are the same informal linguists who have formulated ways of talking about new mobile phone technology, social media platforms, carshare services, and other twenty-first-century technological innovations, addressing translation on multiple levels at once.⁴⁸

CONCLUSION

In the foregoing discussion about translation—whether inter- or intralinguistic, during the colonial or the postcolonial period—I largely avoided discussion of the power corollary, which was ever-present if rarely front of mind for the historical actors in question. Yet at every level of translation, power set the parameters for whose languages and expertise were acknowledged. And while knowledge production was happening everywhere, the ability to establish channels for the communication and recognition of that knowledge was (and is) both a reflection and itself an important form of (local, regional, and global) power. As we’ve also seen, at times eddies emerge that defy our expectations of the directionality of translation as something *either* top-down and oppressive *or* bottom-up and emancipatory. This is not to point to phenomena such as English usage by car mechanics or the publication of “Ajabu si Ajabu!” as indicators of an end to asymmetry: a kind of happy end point defined by fluidity, mutual understanding, and multidirectional flows of knowledge production and communication. On the contrary, work continues—and must continue—in both directions: to translate the results of scientific research into African languages, and to make sure that scientific research conducted in Africa by Africans is evaluated on an equal footing with research conducted elsewhere. The economics of translation, research, and publishing certainly come into play here: such activities cost time and money, precious resources with very particular flows in the current sociopolitical and global economic structures.

There are ongoing efforts to close these gaps: on the interlinguistic level, for instance, the natural language processing group Masakhane (“We build together” in the isiZulu language) has embarked on a project called “Decolonise Science” that will translate 180 scientific papers from the AfricaArXiv database (an open-access preprint repository for African research) into six African languages (isiZulu, Northern Sotho, Yoruba, Hausa, Luganda, and Amharic). “Decolonise Science” is a translation as well as, according to the project’s principal investigator, Jade Abbott, a “terminology creating exercise,” engaging linguists, machine-learning specialists, and science communicators to develop terms in the target languages when needed, in ways that speakers and readers of those languages will readily understand. The long-term goal of the “Decolonise Science” project is to produce free online glossaries in the target languages, which can in turn help improve machine-learning algorithms for further translation. Researchers in the field of translation and science communication have also begun incorporating oral sources into their work; as Lolie Makhubu-Badenhorst of the University of KwaZulu-Natal has stressed, the

⁴⁷ For an authoritative study of Sheng see Chege Githiora, *Sheng: Rise of a Kenyan Swahili Vernacular* (Rochester, N.Y.: Currey, 2018).

⁴⁸ *Ibid.*, pp. 125–155. The moniker “*Kiswahili Kisanifu*,” as Githiora points out, “is a deliberate violation of [Standard Swahili] norms, because an adjective of Arabic origin such as *sanifu* (clean, pure), should not take an agreement marker (the *ki*-prefix). *Kiswahili Sanifu* is the correct form.” *Ibid.*, p. 34 n 4.

absence of specific terminology in the written form of a given language is not proof that the knowledge itself does not exist. “You’re written-centred, I’m oral-centred,” she explains. “The knowledge is there, but it is not well documented.”⁴⁹

Makhubu-Badenhorst’s observation moves us toward the realm of intralinguistic translation, a challenge that the open-access, peer-reviewed journal *Scientific African*, launched in 2018 through the Dutch academic publishing firm Elsevier and the Next Einstein Forum, tries to address. The journal’s articles are written in English, but *Scientific African* is tackling an intralinguistic problem: the lack of receptivity to knowledge produced in Africa and by Africans, even when the “correct” words are being used.⁵⁰ But the editors and collaborators behind *Scientific African* are aiming for more than just recognition from the current global scientific centers of power. Rather, the journal has an explicit focus on intra- and pan-African collaboration and scientific communication.⁵¹ Such initiatives are at once hopeful signs of progress and frank reminders that certain communicators of knowledge continue to confront familiar and damaging barriers and that stark inequalities persist in the current global landscape of knowledge production and communication. As this brief exploration of translation problems and their solutions in East Africa makes clear, these questions are anything but new, and communication of knowledge requires both persistence and agility, as well as the inclusion of as wide a range of interlocutors as possible.

⁴⁹ Sarah Wild, “African Languages to Get More Bespoke Scientific Terms,” *Nature*, 26 Aug. 2021, 596:469–470, <https://doi.org/10.1038/d41586-021-02218-x>, on p. 470. For more on Masakhane see the organization’s website: <https://www.masakhane.io/home>.

⁵⁰ Kia Mackey, “African Researchers Say They Face Bias in the World of Science; Here’s One Solution,” National Public Radio, 28 Sept. 2021, <https://www.npr.org/sections/goatsandsoda/2021/09/28/1016628282/african-researchers-say-they-face-bias-in-the-world-of-science-heres-one-solutio?t=1636807328163>.

⁵¹ For an overview of the journal’s aims see “The Journey Begins: Promoting High Quality Research from Africa,” *Scientific African*, Dec. 2018, 1, <https://doi.org/10.1016/j.sciaf.2018.e00016>; as well as the description of the journal’s scope: <https://www.journals.elsevier.com/scientific-african>.