

Has “God” Made the Apparatus?

Missionaries as Phonographic Mediators in New Guinea and Melanesia

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Missionaries played a key role during the colonial expansion, affecting the social structure, religion, and cultural expressions of local cultures, fostering their own economic enterprises, and contributing to ethnological and anthropological research. But their main aim was to spread the word of God and implement the Christian liturgy, and it is through this missionary practice that they forged intense interactions and alterations of local rites, education, the structure of local communities. Oceania had become a laboratory for Western concepts of race early in the eighteenth century, and for missionary activities in particular.¹ Yet missionary work was identical neither with the colonial effort of colonial states nor with ethnological research undertaken in the academy, to the effect that structural tensions and irritations informed missionary practices. It is through the lens of these tensions, which were an effect of their interventionist practices in the field of education and their economic activities regarded as competitive by other commercial actors, that we can gain some understanding of their role within the network of ethnic and colonial actors.

It will be argued that their ambivalent stance to local languages and the role of German in their pedagogical work, to academic anthropologists and ethnologists, and to semiofficial colonial institutions such as the Neuguinea Companie affected their phonographic recording practices.² Missionary recording activities need to be placed against the wider mobilities of people, phonographs, biological specimen, ethnographic objects, scientific data, and the plants and fruits grown on New Guinean plantations that led to the multidimensional entanglements that were enabled by colonialism and that actively nourished it. Whereas existing research that reconstructs ethnographic activity in the early twentieth century tends to choose a primarily regional perspective and thus canonizes a geography of knowledge

construction established at the time, my aim here is to carve out the contradictory motivations, the multiethnic experiences and contexts, and the agencies of actors and institutions involved.³ This critical review of phonographic activities may stimulate a postcolonial assessment of the material heritage assembled in the form of phonographic recordings and the hidden power asymmetries they represent. From this angle, procedures that may take shape from the contours of narratives not delivered, of recordings not taken, of “meanings,” biographies, and cultural experiences that resisted easy integration into Western knowledge are a prerequisite for a dialogue with the former cultures of origin and local communities.

COMMERCIAL, ACADEMIC, AND MISSIONARY PHONOGRAPHIC RECORDING PROJECTS AFTER 1900

Phonographic recordings for documentation and research purposes do not happen in passing but are carefully orchestrated ethnic and cultural encounters that take place within a specific technical setting. As there is no systematic survey on the attitudes missionaries were entertaining toward the phonograph, it makes sense to turn to a well-researched area in which missionaries were active. New Guinea and Melanesia fall well into this category, and although geographically they represent an outlier viewed from Indonesia, some relevant insights may be gained that might radiate across the Indonesian realm.

Phonographic activity may have been a novelty in the small villages and colonial stations on the coastline. With respect to Asia in general, the recording business had been thriving, leading to considerable recording campaigns and to large imports of phonographs and cylinders into the region.⁴ The record industry targeted the larger commercial ports as transcultural hubs in which marketable new genres emerged.⁵ Colonial officers, missionaries, and a mobile workforce traveling from Europe to the large transcontinental ports and then farther to Indonesia and Papua New Guinea would most likely have taken notice of these developments as they transformed the soundscape of port cities and marked the arrival of phonographs in the households of the local elites.

This commercial endeavor of record companies unfolded parallel to the academic recording campaigns that, in contrast, focused on seemingly untouched rural and isolated musical practices. As a third party, we have missionaries whose attitude to the recording of language and music was ambivalent. Given the high number of missionaries active in the area, only a very small share did recordings, while considerable numbers of anthropologists, naval officers, and physicians were involved in recording campaigns.

A CONTEXTUALIZING APPROACH TO PHONOGRAPHIC RECORDING PRACTICES

New Guinea, divided among Germany, Britain, and the Netherlands, provides a case in point, as it attracted a plethora of ethnographic and recording activities that

has been fairly well documented.⁶ While the role of missionaries for these recordings has been acknowledged, we have no detailed idea of the role that recordings played for them, with respect to both their professional career (i.e., in the context of their religious order) and their interaction with local communities. Moreover, how did missionaries come in contact with phonographic activities? Under which conditions were they implicated in such activities? How did they position their phonographic activities vis-à-vis other actors in the field and other institutions who also made recordings? How did their presence affect phonographic activities by other actors? And how were phonographic activities of missionaries transformed into “results” and “knowledge” that could be circulated in the Western academy?

Recording expertise and ethnomusicological methods, fields that had just been emerging around 1900, were not part of the curriculum of German missionaries. Furthermore, as interventionist actors immediately affected local practices and language, the proactive stance of missionaries could not be brought in line with the research goal of comparative musicology, which very early on was concerned about the loss of Indigenous musical practices and thus pleaded for a salvage ethnography. In a way, missionaries undermined the conviction of ethnologists and comparative musicologists that ethnic actors should be studied and their culture documented in their “original state.” Furthermore, it is safe to assume that the pioneering recordings of early ethnologists in the United States and by anthropologist Franz Boas were not widely known among missionaries. Even if a phonograph was at hand, it remained unclear to what end it should be applied. Record-based didactics of foreign languages did not take shape after 1910, primarily stimulated by Wilhelm Doegen in Berlin.⁷ Again, we cannot establish any link between Doegen’s recordings and writings and the training of missionaries. So what evidence do we have of missionary recording practices in New Guinea?

It is from this angle of the cultural situatedness of phonographic recordings and recording ideologies that I would like to present some material and insights primarily relating to New Guinea and Melanesia. In the early twentieth century, this region saw astounding phonographic and anthropological activity, mainly by British, German, and Austrian biologists, anthropologists, ethnologists, naval officers, marine physicians, and linguists. Inspired by Anna Maria Busse Berger’s penetrating monograph *The Search for Medieval Music in Africa and Germany, 1891 to 1961*, by the extensively commented on CD edition of early Austrian recordings in New Guinea, and by research contextualizing British research in the Torres Straits, I hope to offer some initial thoughts on the understudied topic of the relationship between missionaries and phonography that may be of use to further engage the research and recording contexts in Indonesia as well.⁸

PERSONAL AND INSTITUTIONAL INTERACTIONS IN THE LIGHT OF DIFFERENT RESEARCH PARADIGMS

Special attention will be paid to the close interaction of the missionary Franz Vormann and the Austrian physician Rudolf Pösch. The latter wrote ample reports

that were published by the Royal Austrian Academy of Sciences. He also made extensive documentation of the recordings and their performance contexts, and the recordings have survived and have been edited by Gerda Lechleitner and commented on by Don Niles in a project that could serve as a model for such editions.⁹ Furthermore, missionary Vormann coauthored a grammar of the Monumbo language that implicated phonographic recordings.¹⁰ These written documents and recordings allow us to reconstruct the interaction between these two men and the local population, whose songs, dances, and oral statements are captured on wax. As we have no complete picture of all recording projects and additional potential missionaries involved, it is hard to say if this collaboration was exceptional.

A second important source to understand the role of mission stations in phonographic activities are the diaries of Alfred Haddon, the biologist and zoologist who did research in the Torres Straits and New Guinea in the last decade of the nineteenth century, preceding the Austrian and German campaigns. Complementing his monograph *Head-Hunters: Black, White, and Brown*, which was published in 1901, and the multivolume documentation of the Cambridge Anthropological Expedition to Torres Strait, which he directed and whose first volume was published in the same year, we are able to reconstruct the complexity of interactions with local actors and British missionaries, and its relevance to Haddon's phonographic activities.¹¹

Hypothetically, missionaries can be conceived of as having played an ambivalent role, poised between the observing, analytical stance of ethnologists and the ethnological aspiration to supply ethnographic objects and data and the expectation of their missionary orders to become transformative agents by converting an ethnic population to Christianity. Unlike ethnologists and early comparative musicologists, missionaries lacked a protocol for phonographic practice and a coherent workflow as laid out by Carl Stumpf, Felix van Luschan, and Erich von Hornbostel for early comparative musicology in Berlin. For this reason, only a fraction of the large number of missionaries active in New Guinea and Melanesia ever got in touch with a phonograph. While anthropologists were used to hands-on measurements and to collecting data and specimens and psychologists were accustomed to using measuring devices and could easily familiarize themselves with the phonograph, as did materially oriented ethnologists, missionaries, with their concern about language and liturgy, had few points of contact with technology. Also, none of the German and Dutch missionary societies active in New Guinea and Melanesia—the Herz-Jesu-Mission, the Steyler Mission (Societas Verbi Divini, SVD), the Neuendettelsauer Mission—had their bases in Berlin, so that apparently no missionary reported to the Ethnological Museum there to pick up a phonograph that was held in store for travelers.¹² This is not to say that individual missionaries did not actively collaborate with ethnologists.¹³ But it took a couple of years before leading figures such as Pater Wilhelm Schmidt promoted the case of the missionary-ethnographer-anthropologist, equipped with a phonograph for

the documentation of local musical cultures so as to lend them more authority vis-à-vis the academy, especially in ethnology and anthropology.¹⁴

The institutional interaction between missionary societies, German colonialism, and academic anthropological and ethnographic research was complex. Usually, missionaries were active in regions in which their orders anticipated that a missionary project could be successfully realized. Academic research followed a different agenda, influenced by existing research, competition with other Western nations, and the prospect of collecting anthropological data and ethnographic objects. Colonialism was not untouched by these factors but unfolded against the background of national interests, economic competition, and profit-driven expansion. Colonial discourse would exploit discursive figures familiar from the missionary project, such as the conceived pacifying and culturally elevating impact of Western colonial rule on “primitive cultures,” but the relationship had been marked by tensions ever since the rise of the German colonial project.¹⁵ Similarly, ethnography and anthropology, as well as comparative musicology, could not be subsumed as colonial sciences or disciplines in the service of colonial politics.¹⁶ Likewise, missions had to adapt to unfolding economic and administrative structures brought about by colonialism. Trade-based colonialism had effects on the ground very different from a plantation-based model. As missions were seeking to establish long-term impacts on the cultures they were converting, they were immediately affected by the different dynamics of economic, administrative, and political processes that colonial rule brought to the areas in which missions were active. The situation in New Guinea and Melanesia was unique, as the colonial powers were unable to persuade settlers to come to the region to run plantations and businesses and to establish Western-style ports and cities. Missionaries were thus acting as fairly isolated outposts, depending on the local colonial administration.

The wider research questions of anthropologists who came to the region help clarify the role and self-conception of missionaries. The large expeditions, such as the Torres Strait project and the German Marine expeditions, did cross-disciplinary research, studied the spread of disease, undertook the collection of ethnographic objects and human remains, performed psychological tests, did phonograph recordings, and systematically processed and published on these activities and interventions. Richard Thurnwald studied the social structure of local societies, Pösch did extensive documentations of language and performance practices. Both took phonographic recordings that were analyzed in the Berlin and Vienna archives. The wider research issues of human evolution, of the features that constituted the cultural level of a local culture, and of scientific racism were discussed in a frame in which conceptual concerns of missionaries did not rank very prominently. Common ground could be found in the context of diffusionism, but the academic networks of university and museum experts and the division of labor among academic institutions that processed the objects and findings of expeditions to foreign cultures were initially completely separate from the networks operated by missionary orders.¹⁷

Missions were valuable for establishing contact with local communities so that German colonial actors did not have to start from scratch. At the same time, missions became competitors of colonial companies and entrepreneurs when they set up their own plantations, securing an influx of labor from the villages in which they were active, thus establishing a self-sufficient educational and economic system motivating the young to acquire a good education to be able to find work on the plantation as local teachers in missionary schools or even with the colonial administration and local police force led by German officers.

Missionaries were valuable for similar reasons to ethnologists and anthropologists. Some mission stations ran hospitals that were of extreme importance in the tropical climate and with its constant threat of malaria and other diseases. Through their educational activities, they had access to large groups of ethnic actors, were familiar with their customs and rites (which they tried to replace violently by Christian rites), could identify potential informants, and could recommend travel routes, and although ethnologists followed the ideal of subjects without previous intercourse with Western foreigners, they were mostly grateful to have missionaries in the area. Comparative musicologists who were eager to gather musical expressions from as many cultures as possible did accept recordings from missionaries, especially as they were intimately linked to the ethnic groups with whom they interacted and could supply reliable documentation. A fair share of the wax cylinder recordings of the Berlin Phonogram Archive was thus supplied by missionaries.

THE RECORDINGS MADE BY FRANZ VORMANN AND RUDOLF PÖCH

The Vormann-Pöch collaboration in Potsdamhafen (present day Monumbo Bay), which has been covered in great detail by Don Niles, was initiated in 1904.¹⁸ Vormann had been active since 1896 when his order, the Societas Verbi Divini (SVD), began its activities in German New Guinea.¹⁹ The German Neuguinea Companie had conquered the area in the mid-1880s, equipped with a warrant from the Kaiser, so they considered this land to be German.

Vormann had studied the Monumbo people since 1899, so Pöch could rely on his ample insights into the culture, psychology, religion, and language of the Monumbo.²⁰ Startled by the wealth of cultural expressions in music and dance, Pöch, who was of Austrian origin but based in Berlin at the time, undertook an extensive recording campaign. It is safe to assume that Vormann's familiarity with local ethnic actors stimulated this campaign and established trust among the Monumbo population and Pöch. Ideally, a recording was undertaken under the supervision of a language specialist, as in the case of the recordings for the Lautarchiv made by Wilhelm Doegen, who appointed linguists for the respective languages of his campaign during World War I. Pöch, by the mere luck of having found Vormann, anticipated this model. Pöch fell short of an informed musical and cultural, let alone comparative, analysis of the recorded music and

dance, but his campaign represents an important reference point for current New Guineans in the search for their own history. From his extensive reports we learn about the performance conditions and contexts.²¹ It is here that the template developed by the Vienna Phonogram Archive became relevant as it assured that detailed recording protocols and transcriptions were being made.

As a result of these protocols (figures 13-1 and 13-2), we are able to identify singers, musicians, dancers, and speakers, genres, titles, occasions of their cultural production, and, with the help of Vormann, the texts they used for music and dance.²² From Vormann's point of view, the situation must have been ambivalent. The study of language was an intermediary stage on the way to conversion. Missionaries had to learn local languages to access local populations but at the same time disrupted linguistic and cultural practices through their implementation of Christian rite and faith. Why would a recording matter to Vormann? One could argue that it helped him penetrate the complex linguistic structures, pronunciation, and use of language in the context of music and dance. Western linguists had soon suggested that colleagues recording foreign languages should urge speakers to use standard texts read out in front of the phonograph from a text sheet so that recordings could be compared. These comprised passages from the Bible as well as elementary grammatical structures, the alphabet, and numbers. And indeed, among the Vormann-Pöch recordings, we find sequences of words apparently read from a grammatical table by George Amambura, who was about fourteen years of age.²³ I was able to identify the very same conjugation in the Monumbo grammar published by Fr. Vormann and P. Wilh. Scharfenberger in 1914, though in a slightly different transcription.

In informal language instruction, it is unlikely that one would read out the whole sequence of a conjugation or declination of verbs and nouns. As Vormann makes no reference to phonographic practices in his Monumbo grammar (nor in other publications), we cannot gauge the function of these standardized recorded exercises.²⁴ Did they enhance language instruction of "his" Monumbo pupils, or were they a method that would allow him to grasp the grammatical structures of the language in a manner

Des Phonographisten		Platte Nr. 351	Der Aufnahme	
Vor- und Zuname	Georg Amambura		Touren pro Minute	60
Geschlecht	männl.	Kruse, Stamm	Datum, Ort-Provinz-Land	28. August, Potohambaga, D. Men-
Alter	ca. 14 Jahre	Beruf	Art des Gegenstandes	Freiwillig, 2. Aufnahme, 3. Aufnahme 1. Aufnahme
Geburtsort-Provinz-Land	Potimbelangen, Potohambaga		Eigenes, Fremdes, schon Gedrehtes	Monumbo-Sprache
Wohnort-Provinz-Land	Potimbelangen, Potohambaga		Sprache	Dialekt, Mundart
war früher sesshaft in	in Potohambaga, Potohambaga		Musik, vocat- oder instrumental-	
reist viel, ist viel gereist, wann? wo?	nie gereist		ein- oder mehrstimmig	
Wohnort-Provinz-Land, der Eltern	Potimbelangen, Potohambaga		Stimmungsgattung- oder Instrumente-	
Heimath des Vaters	Potimbelangen, Potohambaga		Geräusche, Schreiben etc.	
Inhalt:			Art der Membran	Glas, Membran des Trichters aus Papiermasse
			Name des Phonographisten	P. J. Pöch, Beruf Arzt
			Transcription oder Uebersetzung	
			(Des Transcribers Name, Beruf, Muttersprache)	
			P. J. Pöch, Deutsch	

FIGURE 13-1. The top section of the questionnaire of the recording protocol (the template of the Vienna Phonogram Archive) for PhA (call no.) 351, which gives the personal core data of the recorded person. From the CD-ROM supplied with the CD edition (Niles, "Comments").

Des Phonographirten Platte Nr. **352**

Vor- und Zuname *Georg Amambura*
Geschlecht *Male, Stamm*
Alter *28* Beruf *wie Platte Nr. 351*
Geburtsort-Provins-Land
Wohnort-Provins-Land
war früher sesshaft in *bis*
reist viel, ist viel gereist, wann? wo?
Wohnort-Provins-Land, der Eltern
Heimath des Vaters *der Mutter*

Inhalt:

*Ek, Georg Amambura,
Pakimalangen aza,
Monumbo okega ahuamo.*

Präsens. Singular.

<i>ek aza</i>	<i>ich bin da</i>
<i>zek ziza</i>	<i>du bist "</i>
<i>ning niza</i>	<i>er ist "</i>
<i>uk uza</i>	<i>sie " "</i>
<i>mik niza</i>	<i>es " " kindl. 3. pers. 1. pers.</i>
<i>ik ija</i>	<i>" " " sächl. 2. "</i>
<i>gik giza</i>	<i>" " " imag. 3. "</i>

Dual.

<i>ip ija</i>	<i>wir beide sind da</i>
<i>up uja</i>	<i>ih " seid "</i>
<i>mah maza</i>	<i>sie " sind " männl. 3. pers. 1. pers.</i>
<i>wah waza</i>	<i>" " " " weibl. " fern</i>
<i>bah baza</i>	<i>" " " " kindl. 3. pers. 1. pers.</i>
<i>mah maza</i>	<i>" " " " sächl. 2. "</i>
<i>gah gaza</i>	<i>" " " " imag. 3. "</i>

Plural

<i>im inda</i>	<i>wir sind da</i>
<i>um unda</i>	<i>ih seid "</i>
<i>ming giza</i>	<i>sie sind " männl. 3. pers.</i>
<i>bah boza</i>	<i>" " " " weibl. 3. pers.</i>

Zum Theile durch Ausstreichen zu erledigen.

Der Aufnahme 10:4 Touren pro Minute **60**

Datum, Ort-Provins-Land *28. Aug. Pöb. Hofen, Mon. - gine*
Art des Gegenstandes *Überwindung des Teufels*
Eigenes, Fremdes, schon Gedrucktes
Sprache, Dialekt, Mundart
Musik, vocal- oder instrumental
ein- oder mehrstimmig
Stimmungsgattung oder Instrumente
Geräusche, Schreie etc.
Art der Membran *Glasbogen des Trichters*
Name des Phonographisten *P. Rang. Pöb. Beruf. Arzt*

Transcription oder Uebersetzung
(Die Transcriptors Name, Beruf, Muttersprache)

Missionar, deutsch

*Ich, Georg Amambura,
wohne in Pakimalangen, und
spreche die Monumbo Sprache*

FIGURE 13-2. The complete questionnaire and sheet for PhA 352. The top section refers us to PhA 351 (pictured in figure 13-1) for the personal data. In the lower section, we find the conjugation of a verb and its translation into German. The role of Fr. Vormann in the transcription and translation is acknowledged in the top section. From the CD-ROM supplied with the CD edition (Niles, "Comments"). Readers can listen to this recording by visiting the UC Press website and the companion SoundCloud website: <https://soundcloud.com/uc-press/sets/missionaries-anthropologists-and-music>.

not practised by native speakers? More options need to be considered. Was it a way of initiating pupils to the role of the phonograph in language teaching, so that they would listen to German grammatical exercises in a similar way? Was he using recordings of German at all? Were there structures in the Monumbo language that he—and foremost, Pöch—could penetrate only by repeatedly listening to the phonograph?

The ambivalence may have run even deeper, given the conviction of missionaries that their word was representing and evoking and performing the word of God. Could such linguistic and religious authority be shared with a machine, side by side with a missionary being the medium of God? In this configuration, the role of recording media was unclear, poised between the mimetic, the potentially magical, and the transcendent, between orality and the mechanistic, quasi-primitive scripturality of the groove.²⁵ Can the phonograph evoke the four senses of scripture? Can the phonograph pray?

Wilhelm Schmidt had shown active interest in linguistic matters and in the notation of the *laute*, the concrete sounds and articulations of spoken language, implementing his *Anthropos* notation after a systematic survey of existing notation methods that he considered unsuitable and worth improving.²⁶ But he did not relate the notation of *laute* by way of transcription to the “notation” of the phonograph.²⁷

THE COMPLEXITY OF CULTURAL INTERACTIONS DURING THE PÖCH RECORDINGS

Pöch encouraged local actors to play the phonograph as well. Further complicating the conceived notion of appointed subjects in front of the phonograph being their sole form of interaction is the fact that the local population accepted the machine and apparently integrated it into their festivities, enjoying listening to what had been recorded from them. Pöch provided sets of listening tubes to enhance the quality of rehearsals so that locals could check their own recordings, but in most cases, the wide display funnel was used to guarantee broad diffusion of sounds to some fifty to eighty people present.²⁸ These are clearly interactions not anticipated by Erich von Hornbostel’s instructions on the use of the phonograph that he issued in the form of a typescript.²⁹ Von Hornbostel was extremely anxious to ensure that Western researchers get representative recordings, that only reliable subjects should be chosen, that recordings of songs should be double checked the next day to avoid being misled about their reputation in the local population or their performance details.

Furthermore, we learn from the reports by Pöch that he used various recording equipment, including a Wiener Archivphonograph and an Edison phonograph, depending on purpose of recording; that he undertook rehearsals to stimulate a sense of acceptable/non-acceptable recordings among the group he was interacting with; that he displayed European songs; that the locals were dealing easily with phonographic presentations, and finally that a local actor asked missionary Vormann in the presence of Pöch, if “‘God’ had made the apparatus.”³⁰

Recording sessions and dialogues leading to such complex and apparently informal and confidential interactions were made possible by missionaries who spoke the language. A second direct effect can be gathered from Pöch’s detailed documentation and the inclusion of young students from missionary schools in the recording sample.³¹ Again, Vormann’s presence is crucial here. Missionaries

aimed at children in their effort for conversion, and this substantially expands the age range of recorded local actors in the recording campaign by Pöch.³²

A study of the circumstances of Pöch's recordings yields additional insights. His travel to Cape Nelson in British New Guinea put him in contact with the head of the Methodist Mission, George Brown, and with British Colonial administrators.³³ In Oro Province, he relied on the assistance of a member of the Motu by the name of Tāmotu, in the service of the government, when recording the Baifa.³⁴ In Pöch's report covering this leg of his trip, there is a photograph accompanying the recording with the call no. Ph 524 for the Vienna Phonogram Archive so that we can synchronize an image of the actors with the recording.³⁵ (Readers can listen to this recording by visiting the UC Press website and the companion SoundCloud website: <https://soundcloud.com/uc-press/sets/missionaries-anthropologists-and-music>.) We learn that the recorded ensemble from the Baifa ethnic group had traveled far and had rehearsed specifically for this recording, giving us a rare instance of an inter-ethnic recording situation and a photograph from which the Western researcher is absent, adding to the paradoxical absence of Western voices (figure 13-3).³⁶



FIGURE 13-3. Pöch's photograph of the Baifa recording group. The original caption reads, "Baifa people sing into the Archiv-Phonograph" (Pöch, "Zweiter Bericht über meine phonographischen Aufnahmen in Neu-Guinea," 818).

RECORDING DISPLACED VOICES FROM NEW GUINEA

The obsessive interest in children and young adults is also evident from the fact that the missionaries brought two young boys from New Guinea to Europe, where systematic phonographic recordings of one of them were made. The first boy was Bonifaz (Tamatai) Pritak-Mawi from Karesau.³⁷ He was trained at an SVD missionary school and learned to sing German tunes. On his en route stop in Sydney, he tried to escape but was found and taken to Europe in 1906, as was Joseph Apo from Tumleo Island. Forty-two recordings of Tamatai were taken by Pater Wilhelm Schmidt himself with the assistance of Wenzel Vobornik in Vienna in 1907, adding to the complex mobilities of local and Western actors, as Vienna had become a recording site of Guinean musical practices, embodied by this young boy at age fifteen.³⁸ We can assume that this encounter and the recording experience persuaded Pater Schmidt to encourage missionaries of his order to use phonographic equipment in their work.³⁹

In a similarly surprising extension of recording sites, linguist Otto Dempwolff, who served in the German Neuguinea Companie and later as a medical officer of the German Schutztruppen in both New Guinea and Africa, recorded sailors from the German South Sea in Daressalam, Africa, in 1906.⁴⁰ As German administrators in New Guinea recruited sailors primarily from mission stations, where some familiarity with the German language could be expected, we can tentatively assume that they were indirectly involved in this recording project as well, which forms part of the wider picture of recordings taken from actors from New Guinea outside their home territory. World War I led to an unprecedented displacement of soldiers from their home territory. This resulted in the foundation of a secret Prussian Phonographic Commission to study representatives of all the ethnic groups held captive in German POW camps. After World War I, a series of recordings of songs and poems in Malay were recorded in Berlin.⁴¹ They were overseen by the linguist Walter Trittell.

GLOBALIZATION AND MULTI-SITE EXPERIENCES
OF WESTERN RESEARCHERS AND OF LOCAL ACTORS

These facts underline the impact of modern globalization. It could be felt in the composition of ship crews who came to New Guinea, in the ethnic composition of workers on the New Guinean plantations, many of them with Malay and Chinese origins, in the hiring of New Guineans to work in Queensland/Australia and Samoa, in the deployment of soldiers from Oceania in Europe during World War I, and in the multi-site experiences of ethnologists and physicians who performed fieldwork and did recordings in New Guinea, many of whom had gathered professional experience in other regions of the world:⁴²

Otto Dempwolff, physician and linguist: German East Africa, New Guinea
 Richard Thurnwald, anthropologist: Italy, Egypt, New Guinea
 Rudolf Pösch, ethnologist: India, Africa, New Guinea
 Augustin Krämer, Navy physician and ethnologist: South America, Oceania
 Emil Stephan, Navy physician: China, Oceania

Likewise, local populations had experienced a long history of interethnic commerce and mobility across the Melanesian archipelago and should not be considered as actors tied to one place. The Berlin Kolonialausstellung of 1897 featured a “Südseedorf,” the Munich Oktoberfest of 1910 a “Samoan village.” World fairs implemented anthropological laboratories to study a cross section of the world’s populations and to perform hearing tests. Brokers, impresarios, and travel agents ensured that people from Oceania were regularly brought to these occasions. And they were soldiers from Oceania in the “enemy armies” of France and Britain, exposed to anthropometric measurements and recording campaigns in German POW camps during World War I. The meticulously filled questionnaires by German linguists and musicologists in the German camps of the prisoners chosen for a linguistic or musical recording provide a glimpse of war-ridden biographies and global displacements affecting so many people.⁴³

TWO COMPETING GERMAN ETHNOLOGICAL INSTRUCTIONS

Returning to Pater Schmidt’s ambition in ethnographical documentation, with the founding of his journal *Anthropos* in 1906 and the publication of the *Anleitung zu ethnographischen Beobachtungen*, he entered into direct competition with academic ethnographic and anthropological research and with the emerging comparative musicology.⁴⁴

The Berlin *Anleitung für ethnographische Beobachtungen und Sammlungen in Afrika und Oceanien* are essentially instructions on how to collect and to research in German Africa and Oceania, the two key regions where Germany held colonies.⁴⁵ It became mandatory for travelers to collect a phonograph from the Berlin museum, and for this purpose, von Hornbostel compiled detailed instructions on how to use the phonograph in the field, which circulated as a typescript.⁴⁶ The printed *Anleitung* by von Luschan included specific paragraphs for the documentation of music, most likely following the advice by von Hornbostel, who oversaw the Berlin Phonogram Archive (figure 13-4).⁴⁷ A comparison with Pater Schmidt’s instructions specifically designed for missionaries and published as a supplement to the journal *Anthropos* reveals extensive overlap and almost identical phrases in the musical section.

In a strategic magazine article from 1908 that sought to confirm to the German public and to colonial science and potential sponsors the relevance of his Phonogram Archive, which he had founded at the Psychological Institute of

3. Jeder Reisende in einem noch wenig erforschten Gebiete sollte mit einem phonographischen Apparate ausgerüstet sein und möglichst viele typische Musikstücke (Einzelgesang, Orchester usw.) aufnehmen. Dabei ist nach der folgenden Anweisung zu verfahren.

A. Ausrüstung.

- a) Phonograph oder Grammophon mit Aufnahme- und Wiedergabemembran, Schalltrichter, Schlüssel.
- b) Reservemembranen oder Reparaturausrüstung.
- c) Ölkanne, Staubpinsel, Lederlappen, Schraubenzieher.
- d) Walzen, tunlichst vor Erschütterung, grosser Hitze, Nässe zu schützen.
- e) Stimmpfeife (Normal-a = 435).

B. Aufnahme.

- a) Uhrwerk vor jeder Aufnahme ganz aufziehen.
- b) Uhrwerk gewöhnlich mit mittlerer Geschwindigkeit laufen lassen; bei sehr hoher, sehr leiser oder sehr schneller Musik grosse Geschwindigkeit.
- c) Der Apparat ist festzustellen und während der Aufnahme nicht zu verrücken.
- d) Jede Aufnahme hat damit zu beginnen, dass das a des Stimmpfeifchens in den Apparat hineingeblasen, dann die Journalnummer und der Titel der Aufnahme hineingesprochen wird.
- e) Schallkörper des Instrumentes, Mund des Sprechers oder Sängers möglichst dicht an den Schalltrichter bringen, ohne diesen zu berühren.
- f) Der Spieler (Sänger) möge, wenn angängig, den Takt durch Händeklatschen markieren (möglichst nahe der Schallöffnung des Trichters).
- g) Nach Gesangsaufnahmen ist der tiefste und höchste Stimmton des Sängers aufzunehmen (Stimmumfang).

Instrumentalmusiker mögen die vollständige Skala ihres Instrumentes in der bei ihnen üblichen Reihenfolge in den Phonographen hineinspielen; bei Saiteninstrumenten sind die leeren Saiten besonders aufzunehmen.

- h) Jede Aufnahme ist sofort probeweise ganz zu reproduzieren.
- i) Notierung der Journalnummer des Orts und Titels der Aufnahme auf der Walzenschachtel.
- k) Möglichst sorgfältiges Ausfüllen des Journals.
- l) Es empfiehlt sich, gelegentlich von einem Musikstück zwei Aufnahmen zu machen (auch von verschiedenen Musikern).

C. Journal.

- a) Fortlaufende Nummer der Aufnahme:
- b) Datum und Ort der Aufnahme:
- c) Person des Sprechers oder Musikers:
 - a) Volksstamm:
 - b) Name:
 - c) Alter:
 - d) Geschlecht:
 - e) Beruf:

FIGURE 13-4. A section from Felix von Luschan's *Anleitung für ethnographische Beobachtungen und Sammlungen in Afrika und Oceanien* (61), covering the documentation of musical practices and the use of the phonograph.

Friedrich-Wilhelms-Universität in Berlin, Stumpf praises “researchers” and their key role in making and supplying recordings. Among the important collections received by the archive, he makes sure to include recordings made by missionaries, thereby counting them among the “travelling researchers.”⁴⁸

Haddon’s journal shows similar almost informal applications of the phonograph during his research and during the Torres Strait Expedition. While the surviving recordings follow the scientific aim to document local customs, dance, and performance practices, this was by far not the only use of the phonograph. It was used to display Western marches to both missionary and local audiences, to replay recordings made from local actors to themselves for repeated listening, as if the phonograph had become a constant companion and a tool to initiate dialogue, to provide demonstrations and amusement, and to provide a break from anthropometric measurements that were taken.⁴⁹ In many cases, missionaries provided the context, established contact, and invited Haddon and his team as well as locals to their school premises. He acknowledges their help and assistance, including the provision of boats.⁵⁰ And he advocates the training of missionaries in anthropology.⁵¹

The interaction of the British researchers with missionaries appears to have been more friendly than between Richard Thurnwald and the German missions. The anthropologist, who did extensive research and recordings in German New Guinea, harshly criticized missionaries for the miserable working conditions on their plantations and the manipulation of local communities by seizing their fear of evil powers to make them amenable to the missionary project.⁵² Other missionaries provided valuable information on local language and customs, as in the case of Josef Winthuis, a Sacred Heart Priest (MSC) who was active in New Guinea for almost twelve years.⁵³ Winthuis systematically collected music and dance on phonographic recordings and learned the Tolai language.⁵⁴ The total quantity of his several dozen recordings is unknown.⁵⁵ From the protocols included in the CD edition of his recordings, we learn that he called local actors by a Christian first name followed by their name (“Andreas Tamana,” “Barbara laLuka,” “Carolina laTaraka” etc.), a practice we also encounter in Pöch (see “George” Amambura and “Bonifaz” Tamatai as discussed above).⁵⁶ Winthuis published extensively on their culture, but to my knowledge, he did not reflect on the use of the phonograph. It is notable that language exercises and language (as in the case of Vormann and Pöch, see above) were apparently not recorded by him on the phonograph, suggesting that the use of the phonograph even among missionaries was fairly diverse.

THE BERLIN SCHOOL OF COMPARATIVE MUSICOLOGY AND THEIR RELATIONS TO MISSIONARY RECORDINGS

The German Kolonialkongresse underlined the interdependencies of missionary work, ethnographic research and colonial administration in the composition of their committees, the topics discussed, and the active participation of

missionaries.⁵⁷ In a rare explicit attempt to actively place comparative musicology and the Berlin Phonogram Archive within the German colonial effort, Stumpf argued in a magazine article as follows: "The new Reich is proud of its colonies and does everything in its power to exploit them materially. It is our duty to combine this with scientific exploitation, i.e., the research into nature and the native culture of the new territories."⁵⁸ While for the Berlin school of comparative musicology the recordings were paramount to creating a disciplinary paradigm and to the development of sophisticated methodologies, missionary coordinators such as Pater Wilhelm Schmidt sensed that phonographic recordings should be included in missionary research and brought in relation to wider concepts such as evolutionism and diffusionism and linguistic research. Yet the outcome fell short of the centralized academic recording campaigns overseen by the phonogram archives and the museums in Vienna and Berlin and by the rise of comparative musicology as a new field of research that followed. This is not to say individual missionaries were not active suppliers to the Berlin Phonogram Archive and important correspondents of von Hornbostel. He included recordings made by missionaries in the representative *Demonstrations-Sammlung*, the compilation of 120 Edison cylinders with recordings across all continents that aimed at schools and the general public and was available in the early 1920s, though in the somewhat outdated format of Edison wax cylinders. Reflecting the geography of Germany's colonies, the collection features many African and Asian recordings. For the region under review here, von Hornbostel included two recordings from the island of Lenggano near Sumatra made in 1909 by the collector and missionary August Lett of the Rhenish Mission.⁵⁹ Lett recorded, among others, a "Vaterunser" and other Christian songs, which were of course not included in the *Demonstrations-Sammlung*, as it ideally comprised only genuine local musical expressions.⁶⁰

From a missionary perspective, the situation was ambivalent: Would a Christian hymn sung by a local class be proof of educational progress, or would the phonograph simply be used to drill the pupils with the promise of hearing their voices on a recording? Were they used for rehearsals, or to instill competition among classes or mission schools? Did missionaries play genuine Western commercial recordings to local schools? Did missionaries measure the missionary success on the basis of recordings? The complete catalogue of the wax cylinders in the Berlin Phonogram Archive carries many entries on "hybrid" musical recordings, that is, recordings of Western and/or Christian tunes sung by non-Western actors in either a Western or a local language, some of them recorded by missionaries. And in most cases, the recorded singers were trained in missionary schools.⁶²

Recordings in Indonesia made for the Berlin Phonogram Archive have not been met with a surge of research similar to those in New Guinea and Melanesia. Apart from missionary Lett mentioned above, the following German travelers were active in the region, some of whose recordings were selected for the *Demonstrations-Sammlung*:

Odo Deodatus Tauern, ethnologist, recorded in Sawai on the island of Seram, Moluku province of Indonesia (included in the Demonstrations-Sammlung)

Max Moszkowski, physician, traveler, and explorer: Sumatra

Dr. Eugen Rudel, physician and explorer: Java (included in the Demonstrations-Sammlung)

Hermann Schoede, surveyor: Sumatra (included in the Demonstrations-Sammlung)

Bernhard Hagen, physician and ethnologist: Sumatra (Demonstrations-Sammlung)

It would be vital to study the recording and performance contexts and the involvement of missionaries for these recording projects as well.⁶³

TRUE ECHOES

Similarly, the *True Echoes* project on early wax cylinder recordings that has recently been undertaken by British researchers and researchers and communities in Oceania stimulates additional questions.⁶⁴ How were the British recordings in British New Guinea organized? What interaction with the local populations did they entail? Did missionaries play a role here as well? And, on a conceptual level, what kind of “echo” speaks to us and to local communities from these recordings? Is the echo a biological trace of ethnic actors, as part of a wider extraction of human remains, ethnographic objects, plants, insects, hair samples, bones? Or is it a mere rendering of the performance situation, captured on wax? Is it echoing a specific conception of doing science, of collecting, observing, extracting? Or do the recordings echo the complex entanglements, such as in the case of Tok Pisin, the local pidgin that was first captured on record by Pösch in East New Britain Province, and of having different ethnic groups present during a recording (Motu/Baifa, see the Pösch example above), of having recorded Oceanic actors in Africa and Vienna, and of having New Guinean congregations sing Christian hymns?⁶⁵

The echo surely also constitutes a way of doing science, as it was conceived in the early twentieth century, foremost an orientation toward an “experimentalization of life.”⁶⁶ This dispositive informed physiology, anthropology, and experimental research during the nineteenth century. It set out to analyze, with the help of technological apparatuses and devices measuring reaction times, blood pressure, and perceptual thresholds, the physiological manifestations of the living in the process of making, speaking, and performing. Phonographic recording practices can be placed within these new discursive systems, becoming a part of experimental designs that appear to capture the “natural” or “the primitive” but that were actually complicating these conceptions. We should seek to expose these complications so that they become visible as a component of ethnological

and anthropological ideologies. Whose “life” has been captured here, and to what avail? Could this asymmetrical power relation ever be broken up and considered as a shared history?

We should complement the exclusively Western perspective of a history of science and research ideologies through pluri-versal questions that address the resonances these practices have found in the researched communities. Did the phonographic campaigns leave a trace in the local imagination, storytelling, crafts, and memory? Do we find instances of a mimetic alterity as observed by Michael Taussig in the *Cuna mola* that absorb, modify, and transgress the talking dog, the brand image of Victor Company?⁶⁷ When we consider the several hundred recordings made by the Torres Strait Expedition, the German expeditions, and Pöch and Thurnwald in the region, we can safely assume that a fair share of the population was exposed to the apparatus. To do justice to the recordings, we must first acknowledge that the recordings are always in excess to any preconceived meanings or functions ascribed to them and that local actors and groups were genuine coproducers of them.

Following the path opened by Julie To’Liman-Turalir on the relevance of early Tolai recordings for the Tolai people today, Don Niles and his collaboration with the Vienna Phonogram Archive and local actors, and the coordinated effort of the *True Echoes* project, which includes institutions from Oceania, we should continue to reflect with local communities, community-based researchers, and global academic audiences about how exactly these recordings relate to traditions of music-making and linguistic practices, while avoiding any thinning of the experience and any strategic ethnic essentialism.⁶⁸

. . .

In summarizing, a small number of missionaries in New Guinea and Oceania made use of the phonograph. It appears to have been a tool in the study of language and for the documentation of local dance and musical practices, but phonographic activity as such is not methodologically reflected in missionary writings. While Pater Schmidt advised Catholic missionaries to use a phonograph, this was not met with the same response as among ethnologists, anthropologists, and navy physicians who supplied large recording collections to the Berlin and Vienna Phonogram Archives, who had set up systematic recording campaigns, followed by systematic transcriptions and comparative analyses of musical practices and the tonal systems and instruments used. On a second look, however, it becomes evident that missionaries were implicated in these projects, too, as enablers of contact with local communities, providers of infrastructures such as school rooms and boats, or direct interlocutors during recording sessions.⁶⁹ In contrast to the academic research undertaken for ethnological museums and phonogram archives, however, missionaries lacked a clear working protocol to compile, process, collect, and compare phonographic recordings.

The present discussion has yielded insights into the complexity of phonographic situations and the recording ideologies of missionaries and ethnologists, as well as anthropologists. By carving out their diverse range of interests and the conditions that led to multi-site experiences of both researchers and members of local populations, the latter forced to travel to Africa and Europe as an effect of World War I, we can widen our understanding of cultural encounters and of power relations during the era of colonial globalization. The informal use of the phonograph by researchers and the open-mindedness of local populations to the apparatus and its acoustic representations can lead to a more profound discussion of the agency of local actors, their role of coproducers of recordings, and of the cultural encounters of which phonographic campaigns were a part.

. . .

As we reconstruct the role of missionaries as phonographic mediators in an increasingly collaborative fashion, powerful contemporary voices from Oceania emerge. This time, they are not “invited” or exposed by Western ethnologists or missionaries. In her proud and reflexive, highly empathetic narrative “Tell Them” (2011), Kathy Jetnil-Kijiner from the Marshall Islands evokes the power of nature, local traditions, myth, religion, the appeal of local handicraft circulating globally, and the skills of her community in her own words, not under the gaze and analyzing ears of Western collectors. In a move countering easy self-exoticization, she advocates human universality in the face of climate change:

*tell them we are sweet harmonies
of grandmothers mothers aunties and sisters
songs late into night
tell them we are whispered prayers
the breath of God
a crown of fushia flowers encircling
auntie mary's white sea foam hair
[. . .]
tell them that some of us
are old fishermen who believe that God
made us a promise
some of us
are more skeptical of God
but most importantly tell them
we don't want to leave
we've never wanted to leave
and that we
are nothing without our islands.⁷⁰*

In “Tell Them,” the missionary and colonial age are not addressed directly. Yet “Tell Them” opens a rich space in which the wax cylinder campaigns and the ambitions

they represent to convert the world to Christianity and to document local languages and musical practices in order to understand how they evolved and relate to Western “high culture” and *Tonkunst* may keep resonating, though in a manner not anticipated one hundred years ago.

NOTES

1. Douglas Bronwen and Chris Ballard, eds., *Foreign Bodies: Oceania and the Science of Race 1750–1940* (Canberra: Australian National University Press, 2008); Helen Gardner, “The ‘Faculty of Faith: Evangelical Missionaries, Social Anthropologists, and the Claim for Human Unity in the Nineteenth Century,’” in *Foreign Bodies: Oceania and the Science of Race 1750–1940*, ed. Douglas Bronwen and Chris Ballard (Canberra: Australian National University Press, 2008), 259–82.

2. Among the New Guinea missions, there was no consistent language policy concerning the German language. See Peter Mühlhäusler, “Die deutsche Sprache im Pazifik,” in *Die Deutsche Südsee 1884–1914: Ein Handbuch*, ed. Hermann Joseph Hiery (Paderborn: Verlag Ferdinand Schöningh 2001), 239–62, especially 243; see also S. Werkmeister, “Die verhinderte Weltsprache. 16. Dezember 1915: Adalbert Baumann präsentiert ‘Das neue, leichte Weltdeutsch,’” in *Mit Deutschland um die Welt: Eine Kulturgeschichte des Fremden in der Kolonialzeit*, ed. Alexander Honold and Klaus R. Scherpe (Stuttgart: J. B. Metzler, 2004), 464–72.

3. I will thus not offer an ethnomusicological analysis of the recorded music, dances, poems, linguistic samples per se.

4. Pekka Gronow, “The Record Industry Comes to the Orient,” *Ethnomusicology*, 25, no. 2 (May 1981): 251–84.

5. Michael Denning, *Noise Uprising: The Audiopolitics of a World Musical Revolution* (London: Verso, 2015).

6. The western part of New Guinea, which was under Dutch rule, was part of the wider Dutch dominion of Indonesia. The best survey of early twentieth-century recording activities in New Guinea is the one provided by Don Niles, who includes maps that show where researchers were active and supplies the quantity of recordings taken for each collection. The survey focuses on the activities for the Berlin Phonogram Archive but includes Austrian, British, and other European academic recording campaigns as well. Don Niles, “The Contribution of the Berlin Phonogramm-Archiv to the Study of Papua New Guinea Musics,” in *Music Archiving in the World: Papers Presented at the Conference on the Occasion of the 100th Anniversary of the Berlin Phonogramm-Archiv*, ed. Gabriele Berlin and Artur Simon (Berlin: Verlag für Wissenschaft und Bildung, 2002), 189–200.

7. Viktoria Tkaczyk, *Thinking with Sound: A New Program in the Sciences and Humanities around 1900* (Chicago: University of Chicago Press, 2023), 188–98.

8. Anna Maria Busse Berger, *The Search for Medieval Music in Africa and Germany, 1891–1961: Scholars, Singers, Missionaries* (Chicago: University of Chicago Press, 2020). Don Niles, “Comments,” *Papua New Guinea (1904–1909): The Collections of Rudolf Pöch, Wilhelm Schmidt, and Josef Winthuis*, OEAW PHA, CD 9 (Tondokumente aus dem Phonogrammarchiv der Österreichischen Akademie der Wissenschaften, Gesamtausgabe der Historischen Bestände 1899–1950, 2000), CD booklet, 17–142. See Anita Herle and Sandra Rouse, eds., *Cambridge and the Torres Strait. Centenary Essays on the 1898 Anthropological Expedition* (Cambridge, UK: Cambridge University Press 2008); Sebastian Klotz, “Murray Island versus Aberdeenshire: Contextualizing the Cross-Cultural Hearing Tests of the Cambridge Anthropological Expedition to Torres Straits, 1898–1899,” in *Testing Hearing: The Making of Modern Aurality*, ed. Viktoria Tkaczyk, Mara Mills, and Alexandra Hui (Oxford: Oxford University Press 2020), 77–108.

9. Niles, “Comments.”

10. Franz Vormann, SVD, and P. Wilh. Scharfenberger, SVD. *Die Monumbo-Sprache*, vol. 1, *Grammatik und Wörterverzeichnis*, with introduction and appendix by P. Ferd. Hestermann, SVD (Vienna: Mechitharisten-Buchdruckerei, 1914 [*Anthropos*, Linguistische Bibliothek, Internationale Sammlung linguistischer Monographien]).
11. Alfred C. Haddon, *Head-Hunters: Black, White, and Brown* (London: Methuen, 1901); Haddon, *Reports of the Cambridge Anthropological Expedition to Torres Straits*, 6 vols. (Cambridge, UK: Cambridge University Press, 1901–35).
12. The situation for missionaries in Africa seems to have been a lot more favorable and the museum's plea to have them travel with a phonograph more successful. See Busse Berger, *The Search for Medieval Music*, 29.
13. Potentially existing documents for contacts between missionaries in New Guinea and Berlin's comparative musicologists, such as those found by Anna Maria Busse Berger for Africa (Busse Berger, *The Search for Medieval Music*, 147) have not yet been studied from a systematic angle.
14. Don Niles found evidence that Pater Schmidt, from 1907 onward, was anxious that Catholic missionaries in all regions of the world were equipped with a phonograph "for the purpose of recording the traditional music in the areas in which they worked" (Niles, "Comments," 94). This would clearly mean Pater Schmidt had expanded his linguistic agenda to musical practices.
15. Markus Joch, "Der Katechismus zur Kolonialfrage. Februar 1879: Friedrich Fabri fragt: 'Bedarf Deutschland der Colonien?'" in *Mit Deutschland um die Welt: Eine Kulturgeschichte des Fremden in der Kolonialzeit*, ed. Alexander Honold and Klaus R. Scherpe (Stuttgart: J. B. Metzler, 2004), 51–58.
16. Stephan Besser, "Die Organisation des kolonialen Wissens. 10. Oktober 1902: In Berlin tagt der erste Deutsche Kolonialkongreß," in Honold and Scherpe, *Mit Deutschland um die Welt*, 271–78.
17. Suzanne Marchand contextualizes Schmidt's missionary ideology within ethnology; see Suzanne Marchand, "Priests among the Pygmies: Wilhelm Schmidt and the Counter-Reformation in Austrian Ethnology," in *Worldly Provincialism: German Anthropology in the Age of Empire*, ed. H. Glenn Penny and Matti Bunzl (Ann Arbor: University of Michigan Press, 2003), 283–316.
18. Niles, "Comments."
19. Niles, "Comments," 27.
20. Niles, "Comments," 27.
21. Pöch regularly submitted research reports from his expeditions to the Imperial Academy of Sciences in Vienna, which published them in their proceedings. Rudolf Pöch, "Bericht über Aufnahmen mit einem Archivphonographen der kais. Akademie der Wissenschaften in Wien, unter den Monumbo auf Neu-Guinea vom 28. Juli bis 24. November 1904," in *Sitzungsberichte der mathematisch-naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften, Wien*, 2Abt-a-114. Rudolf Pöch, "Zweiter Bericht über meine phonographischen Aufnahmen in Neu-Guinea (Britisch Neu-Guinea vom 7. Oktober 1905 bis zum 1. Februar 1906)," in: *Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften Sitzungsberichte der mathematisch-naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften, Wien*, 2Abt-a-116. Band (1907): 801–817(=Nr. X der Mitteilungen der Phonogramm-Archivs-Kommission der kaiserlichen Akademie der Wissenschaften in Wien).
22. I acknowledge that ethnic names, terms, and geographic places used by Vormann and Pöch and their Western colleagues represent their perspective and need to be critically contextualized.
23. Niles, "Comments," 54.
24. Franz Vormann, "Tänze und Tanzfestlichkeiten der Monumbo-Papua (Deutsch-Neuguinea)," *Anthropos* 6, no. 2. (1911): 411–27, www.jstor.org/stable/pdf/4044372.pdf, 202.
25. See Sven Werkmeister's brilliant analysis of primitivism as a discursive figure in Western ethnology, and as a feature of recording technology of the mechanical age. Evoking the tattoos of indigenous actors, the stylus of the phonograph in the form of a co-movement (*Mitbewegung*) literally notates the frequency fluctuations initiated by musical and vocal articulations during a recording session, evading any symbolic dimension that stands at the heart of most scriptural systems; see

Werkmeister, "Die verhinderte Weltsprache," 383–87, for a résumé of his findings.

26. Utz Maas, "Schmidt, Pater Wilhelm," in *Verfolgung und Auswanderung deutschsprachiger Sprachforscher 1933–1945*, last updated in 2018, available online at the website of the Center for Literary and Cultural Research Berlin (ZfL), <https://zflprojekte.de/sprachforscher-im-exil/index.php/catalog/s/415-schmidt-pater-wilhelm>.

27. See Pater Wilhelm Schmidt, P. G. Schmidt, and P. J. Hermes, "Die Sprachlaute und ihre Darstellung in einem allgemeinen linguistischen Alphabet / Les sons du langage et leur représentation dans un alphabet linguistique général," *Anthropos* 2, no. 2. (1907), 282–329, available online at www.jstor.org/stable/pdf/40442189.pdf?refreqid=excelsior%3A4915bd1619893e4b84fb5495f2885c38&ab_segments=&origin=&initiator=&acceptTC=1. In a parallel endeavor, early comparative musicology reflected on the transcription of exotic melodies, seeking a reliable systematic protocol. Otto Abraham and Erich von Hornbostel, "Vorschläge für die Transkription exotischer Melodien," *Sammelbände der Internationalen Musikgesellschaft* 11, no. 1 (October–December, 1909): 1–25.

28. Pöch, "Bericht über Aufnahmen mit einem Archivphonographen," 801–17.

29. See the section "Two Competing German Ethnological Instructions" in this chapter.

30. Pöch, "Bericht über Aufnahmen mit einem Archivphonographen," 901.

31. Phonographic recordings were primarily taken from adult male voices and musicians, certainly curtailing their conceived representative character with respect to the age, range, and sex.

32. Educational statistics compiled by Hermann Joseph Hiery show that some twenty-seven thousand pupils were going to elementary school in the "German Südsee." Schools were run primarily by missionaries. Government schools played a minor part (Hermann Joseph Hiery, "Schule und Ausbildung in der deutschen Südsee," in *Die Deutsche Südsee 1884–1914. Ein Handbuch*, ed. Hermann Joseph Hiery (Paderborn: Verlag Ferdinand Schöningh 2001), 198–238, at 212.

33. Niles, "Comments," 55.

34. Pöch, "Zweiter Bericht über meine phonographischen Aufnahmen," 806.

35. Niles, "Comments," 63.

36. Pöch, "Zweiter Bericht über meine phonographischen Aufnahmen," 808. This visual absence adds to the acoustic absence: none of the researchers' voices have been captured on recordings.

37. Niles, "Comments," 83–93. I rely entirely on Don Niles's comments here.

38. Niles, "Comments," 84.

39. Schmidt himself mentions this use only in passing, focusing on linguistic rather than musical analysis, reserving a musical transcription of these recordings for a later stage. See Niles, "Comments," 84.

40. Susanne Ziegler, *Die Wachszyylinder des Berliner Phonogramm-Archivs* (Berlin: Staatliche Museen zu Berlin, Preußischer Kulturbesitz, 2006) (Veröffentlichungen des Ethnologischen Museums Berlin, Neue Folge 73, Abt. Musikethnologie, Medien-Technik und Berliner Phonogramm Archiv XII), 121, 336.

41. Information on these holdings can be accessed online at www.sammlungen.hu-berlin.de. Recordings from prisoners during World War I carry PK (Phonographische Kommission) as call number heading. After World War I, the recordings of this secret commission comprising over 1,600 items (language and music recordings) in more than 250 dialects were split up between the Berlin Phonogram Archive and Doegen's Lautabteilung (the present-day Lautarchiv of Humboldt University in Berlin; see Reinhard Meyer-Kalkus, "'Bizarres Philologentum' und Repräsentation akustischer Weltkulturen. Phonographische Sprachaufnahmen aus deutschen Kriegsgefangenenlagern im Ersten Weltkrieg im Berliner Lautarchiv," in *Wege zur Weltliteratur*, ed. Gesa Dane et al. (*Komparatistische Perspektiven der Editionswissenschaft*, 15), (Berlin: Weidler, 2015), 43–70. On the website given at the beginning of this note, regional search queries under "Ozeanien" or "Indonesien" or a search for persons such as "Dempwolff" lead to the metadata of the items recorded. Call no. LA 570 features a camera technician of Malay origin named Tando Oemar Saetan Mansoor—who spoke Malay, Dutch, German, English, and French, could write in Arabic, and played the zither and flute—documented in a recording session on December 22, 1925, in Berlin. Readers can listen to this recording by visiting the UC Press

website and the companion SoundCloud website: <https://soundcloud.com/uc-press/sets/missionaries-anthropologists-and-music>.

42. Niles, "Comments," 52.

43. A further cross-sectional observation underlines the entanglements of researchers, a multiplicity of recording sites and contexts; some ethnologists researching in German New Guinea before 1910 were also taking recordings from prisoners during World War I. They are Pösch, Paul Hambruch, who was on the Hamburger Südsee-Expedition (Ziegler, *Die Wachsylinder*, 142–44, especially 344; and the "Hambruch" entries on the website www.sammlungen.hu-berlin.de; see note 42), and Otto Reche, who participated in the same Hamburger Expedition and who did research on POWs in Germany, though without phonographic recordings. On Reche, see Andrew D. Evans, "Anthropology at War: Racial Studies of POWs during World War I," in *Worldly Provincialism: German Anthropology in the Age of Empire*, ed. H. Glenn Penny and Matti Bunzl (Ann Arbor: University of Michigan Press, 2003), 214.

44. The founding document of *Anthropos* in which Schmidt positions Catholic missionary work in the context of linguistics and ethnology is available online at www.anthropos.eu/media/anthropos/docs/PWSAufruf.pdf. Today's editors of *Anthropos* consider the questionnaire as part of the founding documents. It is available online at www.anthropos.eu/media/anthropos/docs/PWSFragebogen.pdf.

45. Felix von Luschan, "Anleitung für ethnographische Beobachtungen und Sammlungen in Afrika und Oceanien," in *Zeitschrift für Ethnologie* (Sonderabdruck) 36 (1904), available online at <https://echo.mpiwg-berlin.mpg.de/ECHOdocuView?url=/permanent/vlp/lit39587/&pn=3>.

46. Lars-Christian Koch, "Images of Sound: Erich M. von Hornbostel and the Berlin Phonogram Archive," in *The Cambridge History of World Music*, ed. Philip V. Bohlman (Cambridge, UK: Cambridge University Press 2013), 475–97.

47. Luschan, "Anleitung für ethnographische Beobachtungen und Sammlungen in Afrika und Oceanien," 58–65.

48. Carl Stumpf, "Das Berliner Phonogrammarchiv," *Internationale Wochenschrift für Wissenschaft, Kunst und Technik* 22 (February 1908), 225–46. Quoted from Artur Simon, *Das Berliner Phonogramm-Archiv 1900–2000: Sammlungen der traditionellen Musik der Welt* [The Berlin Phonogramm-Archiv 1900–2000] (Berlin: Verlag für Wissenschaft und Bildung, 2000), 70.

49. See numerous references in Anita Herle and Jude Philp, eds., *Recording Kastom: Alfred Haddon's Journals from the Torres Strait and New Guinea, 1888 and 1898* (Sydney: Sydney University Press 2020).

50. Haddon, *Head-Hunters*, xi.

51. Sandra Rouse, "Haddon, Missionaries and 'Men of Affairs,'" *Cambridge Anthropology* 21, no. 1 (1999): 9–27.

52. Marion Melk-Koch, *Auf der Suche nach der menschlichen Gesellschaft: Richard Thurnwald* (Berlin: Staatliche Museen Preußischer Kulturbesitz 1989), 98.

53. Niles, "Comments," 94.

54. Niles, "Comments," 94.

55. Ziegler, *Die Wachsylinder*, 312.

56. Niles, "Comments," 99–100.

57. The bulky proceedings of the 1902 Kolonialkongress are available at <https://brema.suub.uni-bremen.de/dsdl/periodical/titleinfo/2009560>. See also Besser, "Die Organisation des kolonialen Wissens."

58. Stumpf, "Das Berliner Phonogrammarchiv," 83.

59. Erich M. von Hornbostel, "Phonogramm-Archiv des Psychologischen Instituts der Universität, Berlin C.2, Schloss(s), Demonstrations-Sammlung," unpublished typescript, ca. 1920, Quoted from Artur Simon, *Das Berliner Phonogramm-Archiv 1900–2000: Sammlungen der traditionellen Musik der Welt* [The Berlin Phonogramm-Archiv 1900–2000] (Berlin: Verlag für Wissenschaft und Bildung, 2000), 100; Ziegler, *Die Wachsylinder*, 214, 359.

60. Ziegler, *Die Wachsylinder*, 214; and the CD-ROM of Ziegler's catalogue.
61. Anna Maria Busse Berger provides evidence of Leipzig missionaries playing recordings of Lutheran chorales by the Thomaner Choir to the Maasai in the 1920s and 1930s from a phonograph. Busse Berger, *The Search for Medieval Music*, 172.
62. To my knowledge, there is no systematic survey of this repertoire and of the function of these hybrid recordings cutting across the regional logic.
63. The publication by Jan Sihar Aritonang and Karel Steenbrink would provide a suitable starting point; see Jan Sihar Aritonang and Karel Steenbrink, *A History of Christianity in Indonesia* (Leiden: Brill, 2008).
64. For further information, please visit the True Echoes website, www.true-echoes.com.
65. Niles, "Comments," 52.
66. Hans-Jörg Rheinberger and Michael Hagner, eds., *Die Experimentalisierung des Lebens: Experimentalsysteme in den biologischen Wissenschaften, 1850/1950* (Berlin: Akademie Verlag, 1993).
67. Michael Taussig, *Mimesis and Alterity: A Particular History of the Senses* (London: Routledge, 1993), 223–35.
68. See Julie To'Liman-Turalir, "Why Historic Recordings Are of Value to the Tolai People Today." In *Music Archiving in the World: Papers Presented at the conference on the Occasion of the 100th Anniversary of the Berlin Phonogramm-Archiv*, 55–58. Berlin: Verlag für Wissenschaft und Bildung, 2002; Niles, "Comments."
69. Pösch, "Bericht über Aufnahmen mit einem Archivphonographen."
70. Excerpts from the lyrics (middle section and closing lines) of "Tell Them" by Kathy Jetnil-Kijiner. The full text can be found at <https://jkijiner.wordpress.com/2011/04/13/tell-them/>.