

A Review of Three Recent Dictionaries of Indigenous Languages Spoken in South America

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Abstract

In this review essay, we compare three recent dictionaries of Indigenous languages spoken in South America. The review covers two print dictionaries—one of which is trilingual (Quechua, Spanish and English) and the other the second edition of a bilingual Q'eqchi'-English dictionary—and a bilingual, digital dictionary hosted online (Wichí-Spanish). The structure of this review essay is as follows: first, we offer a brief introduction to each of the languages covered in the dictionaries. Following the introduction, we offer sections in which we compare the orthographic choices made by the compilers, entry design and ordering within the publications. We also address the overarching structure of each dictionary, questions of language production and reception, as well as editorial decisions relating to the incorporation of neologisms. In addition, we include an analysis of the intended audience and accessibility of each dictionary, supplemented by a reflection about ownership and control of language data, community investment and how these resources address dialectal variation within the language, if indeed any exists.

1. Introduction

In this review article, we offer a comparative review of three recent dictionaries of Indigenous languages spoken in South America. All works were published within the last five years. Before engaging substantively with the texts under review, we offer an overview of each publication, organized by release date. The structure of this essay follows an earlier review by [Turin and Ferreira \(2022\)](#).

Published by Hippocrene Books, the *Quechua-Spanish-English Dictionary: A Hippocrene Trilingual Reference*, was compiled by Odi Gonzales, Christine Mladic Janney and Emily Fjaellen Thompson in 2018 and runs to 343 pages. The publication opens with an English introduction followed by one in Spanish. After these introductions, there follows a bibliography of the sources used in the dictionary and thereafter, the central component of the publication: the Quechua-English-Spanish dictionary. Following this main section, there are two important sub-sections: an English-Quechua dictionary and a Spanish-Quechua dictionary. The publication closes with a note about the authors.

The *Q'eqchi' Mayan Dictionary: Second Edition* was compiled and edited by Jeffrey B. Frazier and published by Omnilex Media via Mayaglot in 2021. Clocking in at 438 pages, the publication includes an introductory section with a preface to the second edition, some notes about the Q'eqchi' linguistic community, and a manual on how to use the book. The book comprises three main sections: (I) Introduction to Q'eqchi' Mayan; (II) Q'eqchi'-to-English Dictionary; and (III) English-to-Q'eqchi' Reversal Index. There are also helpful appendices, which include notes on Q'eqchi' linguistic borrowing and neologisms, a guide to the nomenclature used, Q'eqchi' numbers and a bibliography of sources referred to in the publication.

The third dictionary under review is an online lexical reference [*Diwica*] *Wichi-Siwele*

Lhaybilb/ Diccionario Castellano-Wichi. (www.diccionariowichi.com.ar) released in 2021.

The dictionary was designed by the Universidad Nacional de Formosa, Instituto de Filología y Literaturas Hispánicas, Universidad de Buenos Aires, Laboratorio de Documentación e Investigación Lingüística y Antropológica, and Centro Argentino de Información Científica y Tecnológica in Buenos Aires, Argentina ([Universidad Nacional de Formosa et al., 2021](https://doi.org/10.1017/S0022268321000000)). The dictionary comprises four main sections: (I) the presentation of the dictionary itself; (II) a section geared towards users of the dictionary; (III) entries in alphabetic order; and (IV) credits.

2. Language, culture, and territory

The three South American languages covered by the dictionaries explored in this review are genetically unrelated to one another.

Quechua (Glottocode *quec* 1387) is an Indigenous language spoken by nearly 10 million people in the Andes region of South America and serves as an official language in Bolivia, Ecuador and Peru ([Gonzales et al., 2018](https://doi.org/10.1017/S0022268318000000)). According to the Glottolog ([Hammarstrom et al., 2022](https://doi.org/10.1017/S0022268322000000)), the Quechuan language family has approximately 23 sub-families and 44 child languages. The variety of Quechua presented in the dictionary under review is the variant spoken in the Cusco region of Peru, also known as the Cusco-Collao variety, itself a form of Southern Peruvian Quechua. This dictionary was published in the United States.

Q'eqchi' (ISO 639-3 *kek*) (Glottocode *kek* 1242) belongs to the Mayan language family and is spoken in Guatemala and Belize. According to the Ethnologue, Q'eqchi' is a threatened language ([Campbell et al., 2017](https://doi.org/10.1017/S0022268317000000)) spoken by approximately 1,147,600 people in total ([Eberhard et al., 2022](https://doi.org/10.1017/S0022268322000000)). Q'eqchi' is widely spoken in the departments of Quiché' (northern), in Alta and Baja Verapaz, Isabal, Petén in Guatemala; and to a lesser extent in southern Belize and parts of Mexico and El Salvador ([Frazier, 2021](https://doi.org/10.1017/S0022268321000000), p. vii).

The Wichí language (Glottocode *wich* 1261) (ISO 639-3 *wlv*) belongs to the Mataguayo section of the Matacoan family ([Hammarstrom et al., 2022](https://doi.org/10.1017/S0022268322000000)). Wichí is spoken in three provinces of Argentina—Formosa, Chaco and Salta—and in Tarija in Bolivia. According to the Ethnologue, Wichí is spoken by approximately 31,500 speakers in Argentina ([Eberhard et al., 2022](https://doi.org/10.1017/S0022268322000000)).

In distinct ways, each of the publications covered in this comparative review include some insights into the history of the speakers of the language and their traditional territory. For the *Quechua-Spanish-English Dictionary*, collaborators and language speakers who worked on the publication live in Peru and the United States. Historically, it is believed that members of the Inca community used a Quechua variety as their *lingua franca*, while other languages were spoken by other ethnic groups during the same period. This may offer a clue as to why Quechua and other languages (such as Aymara, Pukina, etc.) have influenced one another, a high level of contact that is reflected in the dictionary ([Gonzales et al., 2018](https://doi.org/10.1017/S0022268318000000), p.1).

The *Q'eqchi' Mayan Dictionary: Second Edition* is focused on filling a gap in existing Q'eqchi' language materials. While most of the resources available in and for the Q'eqchi' language are currently in Spanish, this work is focused on native speakers of English or Q'eqchi' who do not speak Spanish. The Q'eqchi' are the predominant Mayan group in the central highlands and northern lowlands of Guatemala. Q'eqchi' is the largest Mayan language community in Guatemala. Q'eqchi' ancestral territory runs from Coban and the mountain of Xucaneb in the west along the Sierra Yalijux and Cahabon river valley eastward to Lanquin/Cahabon and the mountain of Itzamna' in the east. The Q'eqchi' consider themselves heirs to the culture and history of the ancient Mayan civilization, and the Q'eqchi' language is descended from Proto-Mayan with examples of vocabulary shared between Proto-Mayan and Q'eqchi'. The geographic proximity of the Q'eqchi' to Cholean languages is reflected in the vocabulary and grammar of the language throughout the documented history of these languages (Frazier, 2021, p. vii).

The online dictionary [*Divica*] *Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí* (www.diccionariowichi.com.ar) was compiled by native speakers of Spanish (Castellano) and members of the three communities in which Wichí is spoken (Formosa, Chaco and Salta). The dictionary comprises multiple Wichí dialects, principally the pilcomayeño (Pyo) dialect and the bermejeño (Bjo) dialect. In some cases, the dictionary includes entries from additional subvarieties.

3. Orthography

While some Indigenous languages have unique and well-established orthographies (cf. Schillo & Turin, 2020), many Indigenous languages continue to make use of the alphabet of a regionally-dominant or colonial language, such as English and Spanish, in written contexts.

The compilers of the *Quechua-Spanish-English Dictionary* state that there is some evidence to indicate that as early as the 16th century, Spanish priests used the Roman alphabet to write Quechua (Gonzales et al., 2018, p.2). The orthography used in this dictionary follows standard Cusqueñan Quechua, using five vowels (A, E, I, O, U), two semivowels (W, Y) and twenty-four consonants (CH, CHH, CH', H, K, KH, K', L, LL, M, N, Ñ, P, PH, P', Q, QH, Q', R, S, SH, T, TH, T'). The following Roman alphabetic letters are not used: (B, C, F, G, J, V, X, and Z). Glottal stops are represented by an apostrophe (e.g. *t'ika*), and aspirated sounds are represented with either 'h' or 'hh' (e.g. *phuyu*, *chbachu*).

The *Q'eqchi' Mayan Dictionary: Second Edition* uses a writing system derived from the Roman alphabet, standardized by the Guatemalan Academy of Mayan Languages in 1986 (Frazier, 2021, p.5). The Q'eqchi' alphabet is shown in Table 1 below.

Glottalization in Q'eqchi' is represented by an apostrophe, and all vowels can also be followed by a glottal stop. It is important to note that since Q'eqchi' is a language in the process of developing a written tradition, there is as yet no universal agreement on spelling and punctuation conventions. To address this situation, Frazier (2021, p. vi) includes variant pronunciation, spelling and usage forms as they occur in dialectal variations of Q'eqchi'.

The online dictionary [*Divica*] *Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí*

Table 1: Q'eqchi' Letter Groupings (Frazier, 2021, p.6)

<i>Short Vowels</i> (Xna' tz'iib' seeb' xyaab')	<i>Long Vowels</i> (Xna' tz'iib' aal xyaab')	<i>Consonants</i> (Xyaab' tz'iib')
a, e, i, o, u	aa, ee, ii, oo, uu	b', ch, ch', h, j, k, k', l, m, n, p, q, q', r, s, t, t', tz, tz', w, x, y'

(www.diccionariowichi.com.ar) contains only an orthographic representation of Wichí as spoken in Argentina and does not include the variety of the language spoken in Bolivia (see Table 2). The first records of written Wichí date to the end of the 19th century, and are found in grammatical notes made by the linguist Samuel A. Lafone Quevedo. At the beginning of the 20th century, Anglican missionaries created an alphabet for Wichí in order to translate the Christian Bible into the language. This first alphabet was created by Richard Hunt, and was later modified and revised by members of Wichí communities, who made the *Unified Wichí Alphabet* (Alfabeto Unificado Wichí) in 1988. This writing system is used only in Argentina. Nowadays, there are two distinct Wichí alphabets: one of which is used in Bolivia, the other in Argentina.

The Unified Wichí Alphabet (Alfabeto Unificado Wichí) has two main goals: (I) to include all, or almost all, of the letters that represent particular sounds in the different Wichí dialects; and (II) to be a phonemic alphabet; that is, an alphabet that accurately represents the phonology of the language (Nercesian et al., 2022).

The symbol *ä* represents [ɑ], a phoneme pronounced with the tongue towards the velum. Despite the development of the Unified Wichí Alphabet, the orthography is still in process of standardization, meaning that there may be multiple ways to write any particular word. When these are systematic and predictable, such orthographic variations are represented in the entries of the online dictionary.

4. Entry design and ordering

A dictionary's structural design and lexical ordering are important elements that require careful consideration and intention. Decisions on what to include in a given dictionary entry take on greater relevance in Indigenous language lexicography (cf. Sear and Turin, 2021). When designing a lexical entry for an Indigenous language dictionary, there are many variables that must be taken into account, including, but not limited to: which lexical order the dictionary should follow. Are variants of the same word included in the same entry? Does the entry contain examples of the word in actual use? Does the entry also contain additional grammatical information? Are loanwords included? Are neologisms also included?

The *Quechua-Spanish-English Dictionary* leads with the Quechua alphabetical order (A, CH, CHH, CH', E, H, I, K, KH, K', L, LL, M, N, Ñ, O, P, PH, P', Q, QH, Q', R, S, SH, T, TH, T', U, W, Y) and entries are listed in Quechua, English and Spanish. The following section of the dictionary shows the English alphabetical order (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, Y, Z) for the English-Quechua entries. The last section of the resource is rendered in the Spanish alphabetical order (A, B, C, D, E, F, G, H, I, J, K, L, LL, M, N, O, P, Q, R, S, T, U, V, Y, Z) for the Spanish-Quechua entries. The Quechua-English-Spanish section accords each entry its own line; while the English-Quechua and Spanish-Quechua sections relate entries to one another to make the lists more user-friendly.

Quechua is an agglutinative language meaning that prepositions are not free morphemes and instead function as suffixes attached to the word. Another salient grammatical feature of Quechua is gender of speaker. Different adjectives and nouns may exist for each gender, as well as for human beings (Gonzales et al., 2018, p.5). While the basic form of a verb in Quechua is singular imperative, for pedagogical reasons, the authors choose to translate

Table 2: The Wichí alphabet (Nercesian et al., 2022)

Vowels	Consonants
ä, a, e, i, o, u	ch, ch', fw, h, j, k, k', kh, kw, kw', l, l', lh, m, m', mh, n, n', nh, p, p', ph, s, t, t', th, ts, ts', tsh, w, w', wh, y, y' yh,

Quechua verbs to match Spanish and English infinitive forms. Being a trilingual dictionary, the process of translation involves additional challenges. In some cases, the authors identify some Quechua words as having a more seamless or direct translation into English or Spanish, but not into both languages. In some cases, the compilers chose to include both a literal and a free translation.

The entry design of the Quechua dictionary in the Quechua-English-Spanish section is as follows: a headword is written in its orthography, followed by an abbreviation for the part of speech (adjective, adverb, conjunction, indefinite article, imperative, interjection, interrogative, noun, number, preposition, pronoun, or verb), an English translation and finally a Spanish translation (see Figure 1).

The entry design of the Quechua dictionary in the English-Quechua section includes headwords written in the English orthography, followed by an abbreviation for the part of speech, and then a Quechua translation. In these entries, related forms are, on occasion, included (see Figure 2).

The entry design of the Spanish-Quechua section of the Quechua dictionary includes headwords written in the Spanish orthography, followed by an abbreviation for the part of speech, and then a Quechua translation (see Figure 3).

In the *Q'eqchi' Mayan Dictionary: Second Edition*, the dictionary proper starts in Section II, where the reader is offered an alphabetical list of Q'eqchi' words followed by their part of speech and English equivalents. The alphabetical order is based on the Q'eqchi' orthography (A, Aa, B', Ch, Ch', E, H, I, Ii, J, K, K', L, M, N, O, Oo, P, Q, Q', R, S, T, T', Tz, Tz', U, Uu, W, X, Y). Many entries are illustrated, and subentries of related terms are clustered under the main entry for many of the headwords. Section III offers a reversal index of all the English words corresponding to the Q'eqchi' entries shown in Section II (Frazier, 2021, p. xii).

In the Q'eqchi'-English section (Section II), entries are composed of a headword, the part of speech, an English definition, in some cases an illustration, examples, and sub-entries (see Figure 4).

In the English-Q'eqchi' section (Section III), entries are composed of a headword, the part of speech, and a Q'eqchi' translation (see Figure 5).

Finally, all the lexical entries for the online dictionary [*Diwica*] *Wichi-Siwele Lhaybilh/ Diccionario Castellano-Wichí* are contained in the 'alphabetical order' section of the dictionary (<https://diccionariowichi.com.ar/galeria/page/3/>). The Wichí section begins on page 1 and ends on page 68. The Spanish section begins on page 68 and ends on page 125. The dictionary contains 3,500 entries so far, both for Spanish and Wichí. The authors have included a way for users to make contact and request a specific entry in both languages, demonstrating that this lexical collection functions as a living resource. Wichí entries are presented following the Wichí alphabetical order, while Spanish entries are presented in the

kichay v. open || v. abrir

Figure 1: Entry for Quechua verb *kichay* 'open' (p. 61).

open adj. kichasqa ° v. kichay; **make an opening** wanphuy

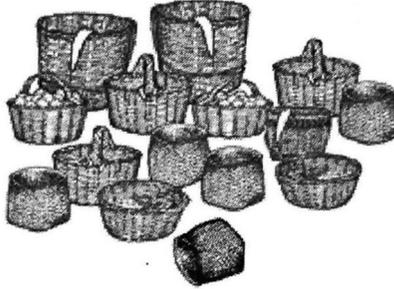
Figure 2: Entry for English verb *open* with Quechua translation (p. 206).

abrir v. kichay

Figure 3: Entry for Spanish verb *abrir* ('open') with Quechua translation (p. 246).

Spanish alphabetical order. Alongside word listings, some grammatical notes about Wichí and Spanish are also provided. In this dictionary, inalienable nouns always carry the prefix of the possessor in the third person singular. Additionally, verbs are always shown with the prefix indicating the subject, in this case, third-person singular.

In the 'alphabetical order' section, a finder tool allows the user to type the desired word in Wichí or in Spanish (see [Figure 6](#)).



chakach noun. basket (large-sized)
Nujenaq lin chakach. My basket is full [ACDI].
xchakachil aq' laundry basket.
xchakachil b'aq rib cage. See: polok'.
xchakachil mul wastebasket, garbage can, trash can.

Figure 4: Entry for Q'eqchi' noun *chakach* 'basket (large-sized)' (p. 72).

basket (large-sized) noun. **chakacha**

Figure 5: Entry for English noun *basket (large-sized)* with Q'eqchi' translation (p. 288).



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afwenche ~ fwenche	afwenche w'ole
afwenche w'ule	afwoj
afwtintsaj	afwtsaj
afwtsinaj	afwu
ahächuy	ahät
ahatay	ahäthlo
ahättaj	ahäyaj

Buscar... // Ekwe - Ukwe... Q

¿No encontraste la palabra que buscabas?

Contanos cuál es desde aquí

Figure 6: Finder Wichí dictionary (<https://diccionariowichi.com.ar/galeria/>).

In general terms, each of the entries in the Wichí dictionary contains some or all of the following fields: a) a headword; b) a translation (Wichí-Spanish/Spanish-Wichí); c) an indication of dialect group; d) grammatical information (part of speech, and indications as to whether the entry is an irregular form); e) some indication as to whether the entry is part of a defined semantic field; f) the scientific name of the animals or insect to which the entry refers; g) etymological information and information about loanwords; h) an example of the term in use, especially in the case of adverbs and interrogative particles; and i) illustrations in the case of birds and some of the entries related to beekeeping. Figure 7 shows an example of a Wichí-Spanish entry, and Figure 8 shows an example of a Spanish-Wichí entry:

5. Megastructure and language production versus reception

The megastructure of any dictionary refers to the front matter, the back matter, and the general ordering of languages in dictionaries that contain more than one (Anderson, 2020,

The screenshot shows the website header with the logo 'WICHÍ-SIWELE LHAYHILH diccionario castellano-wichí' and navigation links: PRESENTACIÓN, PARA EL USUARIO, ORDEN ALFABÉTICO, and CRÉDITOS. The ISSN 2718-8957 is displayed. The main content area features the headword 'wok'ó' in bold, followed by the variant 'Pyo (- variante dialectal: wukw'u)' and the part of speech 'Sustantivo'. A numbered example '1 Ornit: lechuza bataraz' is provided. On the right, there is a search bar with the text 'Buscar... // Ekwe - Ukwe...' and a magnifying glass icon. Below the search bar, a message asks '¿No encontraste la palabra que buscabas?' and provides a link 'Contanos cuál es desde aquí'. A vertical sidebar on the right contains the text 'Notas Gramaticales'.

Figure 7: Entry for Wichí noun *wok'ó* 'lechuza bataraz' ('rufous-legged Owl') (<https://diccionariowichi.com.ar/g5346747b-16e4-44ed-92e4-989ddef43c0e/>).

The screenshot shows the website header with the logo 'WICHÍ-SIWELE LHAYHILH diccionario castellano-wichí' and navigation links: PRESENTACIÓN, PARA EL USUARIO, ORDEN ALFABÉTICO, and CRÉDITOS. The ISSN 2718-8957 is displayed. The main content area features the headword 'lechuza bataraz' in bold, followed by the part of speech 'Sustantivo'. A numbered example '1 Ornit: wok'ó (Pyo) ~ wukw'u (Bjo)' is provided. On the right, there is a search bar with the text 'Buscar... // Ekwe - Ukwe...' and a magnifying glass icon. Below the search bar, a message asks '¿No encontraste la palabra que buscabas?' and provides a link 'Contanos cuál es desde aquí'. A vertical sidebar on the right contains the text 'Notas Gramaticales'.

Figure 8: Entry for Spanish noun *lechuza bataraz* ('rufous-legged Owl') with Wichí translation (<https://diccionariowichi.com.ar/g403bbb35-eb8f-4626-ac6a-435b3a8bd123/>).

p. 99-100). The three dictionaries under review each contain an introductory section. The *Quechua-Spanish-English Dictionary* offers an English introduction and a Spanish version of the same introduction. In this introduction, the authors focus on the history of the Quechua language and its territory, a history of the orthography, a discussion of past Quechuan dictionaries compared with the current dictionary, some helpful Andean cultural context, a discussion of the use of suffixes and some additional clarifications. The section closes with a few notes on the format of the dictionary.

The *Q'eqchi' Mayan Dictionary: Second Edition* opens with a preface to the second edition noting what is new in this edition, namely: additional illustrations, variant word forms, some comments on how speakers use particular features of the language, and a comprehensive overview of Q'eqchi' grammar for English-speaking students of the Q'eqchi' language. In this introductory section, general information about the Q'eqchi' linguistic community is also provided along with a subsection on how to use the dictionary. The online dictionary [*Diwica*] *Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí* also includes an introductory section, entitled *Presentación* ('introduction'). This section outlines how the dictionary is open to constant editing and revision and notes the existence of a section of the website where users may contact the website administrators to suggest a missing word in the hope that it might later be added. This section also offers an explanation in general terms of the territory of the Wichí language communities, the orthography used, and the story behind the compilation of the dictionary (<https://diccionariowichi.com.ar/presentacion/>).

Another central feature of the megastructure of a multilingual dictionary relates to the order of the languages represented. Each of the three dictionaries under review lists the Indigenous language first in its title (Quechua, Q'eqchi' and Wichí, respectively), and in each case, the Indigenous language is also shown first in the principal section of each lexical compilation. Since each of the three dictionaries under review focuses on an Indigenous language and at least one other language (English, Spanish or both), a helpful area to assess is the amount of information contained in the entries within each section. This is important to underscore because bilingual dictionaries tend to be asymmetrical—albeit for logistical and financial reasons—with one direction very often carrying more information. It is appropriate and welcome that for bilingual dictionaries of minoritized, endangered or Indigenous languages, the Indigenous language leads and is accorded priority (Turin & Ferreira, 2022).

Language production (speaking and writing) and language reception (reading, listening and comprehension) are central aspects in the making of any dictionary (Anderson, 2020). Since the primary focus of Indigenous language dictionaries is language revitalization and reclamation, it is to be expected that many such dictionaries prioritize language production and devote more space to representing information about the Indigenous language in question. This is the case for the *Quechua-Spanish-English Dictionary* and the *Q'eqchi' Mayan Dictionary*, both of which have extensive descriptions in the Indigenous language in question; namely, Quechua entries are translated into English and Spanish; and in the other dictionary, the Q'eqchi'-English section is far more extensive, with illustrations, examples, and sub-entries, along with an introduction to Q'eqchi' Mayan in which the author offers a brief general description of the grammar of the language. Of the three under review, the outlier is the online dictionary [*Diwica*] *Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí*, in which both the Wichí-Spanish and Spanish-Wichí entries appear to contain the same amount of information. Moreover, this dictionary contains grammatical notes for both languages: Wichí and Spanish.

6. Neologisms

The *Quechua-Spanish-English Dictionary* does not contain information about the incorporation of new words and terms. It also does not contain what might be considered new terms for concepts such as 'computer', 'cellphone' or 'camera.' The *Q'eqchi' Mayan*

Dictionary: Second Edition includes neologisms developed by Q'eqchi' linguists from Q'eqchi' root words to describe contemporary elements, and also incorporates some Spanish and English loanwords. The use of neologisms is encouraged by Mayan language authorities in Guatemala who update the existing vocabulary of their languages with new terms to document and describe features of the modern world. Mayan roots and affixes are used to create new terms which are then published and incorporated into educational materials at all levels of school. In this dictionary, the compiler marked any entries that included proposed neologisms with a [neo] tag so that users are made aware that while the neologism may have been proposed by an authority, it may not yet be in everyday use in the Q'eqchi' community.

Despite the fact that the *[Diwica] Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí* dictionary does not mention whether or not it includes neologisms, it can be inferred that the compilers would be willing to include them given the existence of a dedicated online page where users can complete a form to suggest a Wichí or Spanish word that is not currently in the dictionary (see [Figure 9](#)).

7. Intended audience and accessibility

This section of our review addresses the imagined target audience of each dictionary, how accessible we anticipate it will be for the intended audience, the medium of publication and the purchase price.

The *Quechua-Spanish-English Dictionary* is available in print with a paperback copy costing 29.95 USD as noted on the Hippocrene book's website (https://www.hippocrenebooks.com/store/p418/Quechua-Spanish-English_Dictionary.html). There is no digital copy available of this dictionary. According to the compilers of this dictionary, the idea for the resource to be trilingual emerged in a classroom at New York University, where Peruvian professor and native Cusqueñan Quechua-speaker Odi Gonzales serves as a faculty member. Graduate students Christine Mladic Janney and Emily Fjaellen Thompson completed the New York University Quechua program. In the process, they realized that there was no dictionary that contained commonly used words, which served as their first inspiration for the creation of this dictionary. The other goal of the dictionary is to reach audiences

The image shows a contact form on a website. At the top left is a logo with the letters 'W' and 'U' in a stylized font, followed by the text 'WICHI-SIWELE LHAYHILH diccionario castellano-wichi'. To the right of the logo are navigation links: 'PRESENTACION', 'PARA EL USUARIO', 'ORDEN ALFABETICO', and 'CRÉDITOS'. Below the logo is the ISSN number 'ISSN 2718-8957'. The form itself has four main input areas: 'NOMBRE' (Name), 'NOMBRE' (Name) and 'APELLIDOS' (Surnames), 'CORREO ELECTRÓNICO' (Email), and 'COMENTARIO O MENSAJE' (Comment or Message). There is a search bar with the text 'Buscar... // Ekwé - Ukwé...' and a magnifying glass icon. Below the search bar is a message: '¿No encontraste la palabra que buscabas? Contanos cuál es desde aquí'. At the bottom right of the form is a vertical orange button labeled 'Notas Gramaticales'. At the bottom center of the form is a button labeled 'Enviar'.

Figure 9: Contact form on the *[Diwica] Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí* website (<https://diccionariowichi.com.ar/contacto/>).

of Quechua-speaking communities in the United States and Peru who might not have access to many of the existing Quechua language materials (Gonzalez et al., 2018, p. 12).

The *Q'eqchi' Mayan Dictionary: Second Edition* is available in print with a paperback and a hardcover copy costing \$36.68 CAN, as shown on Amazon. There is no digital copy available of this dictionary. The publisher's website (<http://mayaglot.com/blog/>) was last updated in 2021 and contains no mention of the book, which was released in 2021. The main stated goal of this dictionary is to fill a gap not covered by other Q'eqchi' materials. Most existing Q'eqchi' language materials are exclusively in Spanish and therefore not easily accessible to speakers of English or native Q'eqchi' who might not speak Spanish. This is the reason why the dictionary was compiled using Q'eqchi' and English as meta languages. The author's intention is to reach medical and religious volunteers working in Q'eqchi' communities who do not speak or read Spanish, Q'eqchi' speakers looking to work or study in English-speaking countries, as well as Q'eqchi'-speaking immigrant children in the United States (Frazier, 2021, p. v).

The *[Diwica] Wichi-Siwela Lhayhill/ Diccionario Castellano-Wichí* is an online dictionary with free public access (<https://dicionariowichi.com.ar/presentacion/>). The dictionary represents a collective effort by native speakers of Wichí from three communities in Argentina (Formosa, Chaco and Salta) with participation from young people, adults and elders. The dictionary was compiled from word lists used in linguistic studies, terms from oral narratives, and terms from specific lexical domains, all of which were produced by native speakers of Wichí. This dictionary is fully open access with no viewing restrictions.

8. Ownership, control, access, and possession

Questions of ownership, control, access and possession are crucial in the context of safeguarding and protecting the traditional and cultural knowledge of Indigenous communities. The First Nations principles of OCAP (Ownership, Control, Access and Possession) are important and helpful standards that all scholars working in collaborative language partnerships with Indigenous communities would benefit from knowing and incorporating. These principles assert that Indigenous communities have control over all data collection processes and should own and control how their information is used, stored, interpreted and shared (FNIGC, 2022).

A relatively simple and effective way to showcase and highlight OCAP principles is through explicitly acknowledging community participation and recognizing the specific contributions that individuals have made to the work itself (Turin, 2021). Each of the three dictionaries documented in this review article acknowledge community members who contributed to the compilation and production of the work. In the case of the *Quechua-Spanish-English Dictionary*, the first page contains acknowledgements where the authors thank the Quechua and Kichwa speakers in Peru and the United States who contributed with their languages and cultural practices: Juan Reymundo Vega, Nilda Bendezu Flores, Regina Tupacyupanqui Arredondo, Edith Zeballos, Benita Paredes Cusi, Ruth Yabar Challco, Elva Ambía, the Quechua Collective of New York, Charlie Uruchima and Kichwa Hatari Radio.

The *Q'eqchi' Mayan Dictionary: Second Edition* has no self-standing acknowledgement section, nor are the efforts of any named native speakers explicitly referenced. The dictionary does, however, include a section about the Q'eqchi' linguistic community, offering some general features of the Q'eqchi' language and the territory in which it is spoken including this rather revealing statement by the author:

'Q'eqchi' is alive and thriving and continues to undergo a dynamic expansion in its vocabulary, educational standards, and literary arts. With growing interest and activity on the part of native speakers to explore and develop their language as a primary manifestation of their culture...I remain as enamored as ever with this language and the people that speak it as a source of sustenance...' (Frazier, 2021, p.vi)

Frazier notes that this second edition builds upon the first *Q'eqchi' Mayan Dictionary* originally published in 2015. The new edition includes additional vocabulary and illustrations as well as 2,400 example sentences which derive from 'authoritative sources' cited and documented in the bibliography.

Finally, the online dictionary [*Diwica*] *Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí* contains a section in which credit is given to the authors of the entries who are members of the different communities in Argentina (Formosa, Chaco and Salta respectively). Given the importance of recognizing and uplifting the work of Indigenous language champions working in their own communities, we find it appropriate to recognize by name these individuals in this review: Abel Saravia, Alberto González, Angélica Aranda, Anselmo Manco, Arminda Paico, Armando Ortiz, Beatriz Delfín, Brenda Ruiz, Brígida Bonilla, Bruno Vega, Constantino Peralta, Cristian Pérez, Dalecia Benítez, Daniel López, Eduardo Saravia, Eugenio 'Lalo' Vicente, Eugenio Moreno, Eva Ruiz, Facundo Aranda, Francisco 'Paco' Palacios, Francisco López, Gerardo Pérez, Graciano Enrique, Graciela Bramajo, Guillermina González, Gustavo Hilario, Higinio Berruti, Hortencia Bonilla, Ícalo Vicente, José Eusebio, Juan González, Luciano Bonilla, Luciano Delfín, Luis Bazán, Mabel Cuevas, Manuel Pereyra, Marcelino Pérez, Marcial López, Osvaldo Segovia, Paulino Ruiz, Rufino Adolfo, Serafina Galián, Severiano Bonilla, Silvano Ruiz, Silverio Moreno, Ulises Fernández, and Virgilio López. In addition, the illustrations contained in the dictionary were drawn by community members Pablo Chianetta and Carlos Spagarino.

9. Community investment and engagement

The *Quechua-Spanish-English Dictionary* took more than six years to complete and represents the extraordinary commitment and life work of Professor Odi Gonzales, a native speaker of Quechua. The dictionary is driven by the perspective of a native speaker, and enriched by insights from his students who represent a community of people interested in learning Quechua as a second language. It is revealing that the compilers consulted speakers from Peru and the United States, offering an important indication of the level of community investment in the dictionary. The Quechuan community currently residing in the United States, appears to be very committed to preserving their language.

The *Q'eqchi' Mayan Dictionary: Second Edition* is a project developed mainly by the author and compiler Jeffrey Frazier. The author does not indicate whether he developed this resource with consultants from the Q'eqchi' community or whether the project was in any way community-driven. Frazier notes that speakers of Q'eqchi' in Belize are some of the most interested dictionary users because in some public schools in this country, English is the language of instruction, and therefore, a Q'eqchi'-English dictionary is useful to them.

The online dictionary [*Diwica*] *Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí* is a community-driven project created by community members for community members who retained autonomy in designing the entries and the illustrations. As noted above, if a user cannot locate a word, they are encouraged to contact the authors to suggest the addition.

10. Dialects and strategies for representing variation

A particularly thorny issue in Indigenous language lexicography relates to the careful balancing between prescriptivism and descriptivism. If a particular dialect or language variety is considered to be more 'prestigious' than others, prescriptivist leanings may emerge. For this reason, it is interesting to review what decisions have been made in relation to including internal dialectal variation in the dictionary in question.

The *Quechua-Spanish-English Dictionary* is focused exclusively on Cusqueñan Quechua since one of the authors is a native speaker of that dialect. However, the authors acknowledge

that Quechua is a language family with many varieties, some of which are mutually intelligible and others not (Gonzales et al., 2018, p. 1).

In the *Q'eqchi' Mayan Dictionary: Second Edition*, the author mentions that he has included variant pronunciation, spelling and usage forms that exist within and across the dialectal variations of Q'eqchi'. The author also notes that the dictionary should not be thought of as exhaustive, and that someone interested in dialectal variation can consult other Q'eqchi' language sources that are more specifically focused on questions of dialect and variation. Additionally, according to the author, due to the historical evolution of the language, there is a high degree of intelligibility between Q'eqchi' speakers from the lowlands and the highlands (Frazier, 2021, p. vi).

The online [*Diwica*] *Wichi-Siwele Lhayhilh/ Diccionario Castellano-Wichí* dictionary contains variant forms from the largest dialectal complexes: the Picolmayeño and the Bermejeño. However, this dictionary only includes orthographic variants from the Wichí language spoken in Argentina and does not contain orthographic variants from the Wichí spoken in Bolivia.

11. Conclusion

In conclusion, each of the three publications under review are significant contributions to Indigenous language lexicography. While two of the publications are explicit about their engagement with the speech community and transparent about their approach to research ethics in the process of compiling the dictionary, the other is less so. Serious efforts committed to the collaborative documentation of Indigenous and endangered languages often produce valuable information about the languages themselves alongside important context about the cultural background, creativity, and endurance of the Indigenous communities themselves. To conclude on a sobering note, it is worth reminding readers that Indigenous communities the world over continue to this day to struggle against oppressive regimes and centuries of colonialism to assert the right to speak and write their languages. These three publications are a testament to this resilience.

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