



**HAL**  
open science

# Investigating the Indigenous languages of the Americas: History and prospects

Luca Ciucci, Marcin Kilarski

► **To cite this version:**

Luca Ciucci, Marcin Kilarski. Investigating the Indigenous languages of the Americas: History and prospects. David Bradley, Katarzyna Dziubalska-Kolaczyk, Camiel Hamans, Ik-Hwan Lee and Frieda Steurs. Contemporary Linguistics: Integrating languages, communities, and technologies., Brill, In press. hal-04568391

**HAL Id: hal-04568391**

**<https://hal.science/hal-04568391>**

Submitted on 4 May 2024

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# **Investigating the Indigenous languages of the Americas: History and prospects**

Luca Ciucci (Collegium de Lyon, Dynamique Du Langage, James Cook University) &

Marcin Kilarski (Adam Mickiewicz University in Poznań)

## **1. Introduction**

In this paper we address the state of the art in the study of the Indigenous languages of the Americas (henceforth American languages) and reflect on the perspectives for future research.<sup>1</sup> Since the first 16th-century grammatical descriptions, new data have contributed to the development of language study and the birth of modern linguistics and continue to inform linguistic theory. Ongoing documentation helps language preservation, while historical data improve our understanding of present-day languages and contribute to their revitalization. Linguistic descriptions have also affected the perception of Indigenous languages and cultures over time, reflecting beliefs and prejudices about less familiar languages.

Sections 2 and 3 illustrate the genetic and typological diversity of American languages and §4 reflects on their contribution to linguistic theory, which is illustrated in §5 with a few selected features. Finally, §6 concludes and offers some remarks about ongoing documentation.

## **2. An overview of the languages**

The Americas host a considerable number of lects, a heritage under threat since the first contact with Europeans. Ethnologue (Eberhard et al. 2023) lists 1,070 living languages, i.e., 14.9% of the world's 7,168 languages, while Glottolog (Hammarström et al. 2023) counts 897 languages among the world's 6,755 (excluding extinct ones), i.e., 13.27% of linguistic diversity. Language loss is a serious reason for concern: Indigenous American languages are only spoken by 0.8% of the world's population according to Ethnologue, and 794 among the 897 languages in Glottolog (88.51%) show some level of endangerment. Glottolog identifies 382 languages that are no longer spoken, which is only a part of the overall language loss. For North America, Goddard (1996: 3) estimated that around 209 languages were spoken in 1995, or about half of

---

<sup>1</sup> Given the vastness of the subject and the word limit, we can only briefly address some topics without any claim to completeness. Following traditional usage, we distinguish between North America (languages and cultures north of central Mexico), Mesoamerica, and South America.

those used around 1500AD, while 60% of Amazonian languages became extinct after the conquest (Aikhenvald 2012: 21).

American languages show remarkable genealogical diversity. Campbell's (2013) classification of the world's languages (including extinct ones) recognizes 420 genetic units (language families and isolates); among these, 184 are in America, which thus hosts 43.80% of genealogical diversity. They include many small families and 81 isolates, with 56 in South America. Therefore, with some exceptions, e.g., Campbell (1997), most reference studies focus on specific areas, e.g., Sherzer (1976), Mithun (1999), Siddiqi et al. (2020), and Dagostino et al. (2023-2024) for North America, Suárez (1983) and Wichmann (2024) for Mesoamerica, Campbell & Grondona (2012) for South America, and Adelaar with Muysken (2004) for Andean languages. Several volumes deal with Amazonian languages: Derbyshire & Pullum (1986-1998), Dixon & Aikhenvald (1999b), Aikhenvald (2012), and the ongoing series by Epps & Michael (2023). Historiographic overviews are in Campbell (1997: 26-85), Adelaar (2012) for South America, and Kilarski (2021) for North America. The value of missionary grammars and dictionaries for linguistic studies, language documentation and reclamation has only recently been acknowledged (Koerner 2002; Zwartjes 2012). Online bibliographies are Fabre (2005-2023), Adelaar (2022), Dietrich (2022), England & Zavala Maldonado (2022), and Mithun (2022a).

### **3. A typological overview**

Indigenous American languages are also very diverse typologically. While it is impossible to identify traits common to the whole continent, there are many possible areal phenomena.

Several features are common in North America (Boas 1911; Mithun 1996, 1999). In phonology, an example is provided by complex consonant inventories in the West, especially in the Pacific Northwest, also characterized by cross-linguistically uncommon sounds, e.g., the complex series of ejectives and laterals in Tlingit (Athabaskan-Eyak-Tlingit; Alaska, British Columbia), and complex syllable structure (Maddieson et al. 2001; Rice 2020). As regards word and sentence structure, most languages have traits typically associated with polysynthesis, i.e., morphological complexity, pronominal affixes indexing core arguments in the verb, noun incorporation, and applicatives (Mithun 2017a). Paradigms of pronominal prefixes may be complex, with 47-61 prefixes found in Iroquoian languages (Michelson 2016). Very few languages lack bound pronouns or traces of noun incorporation, which include medial suffixes in Algonquian languages, lexical suffixes in the Pacific Northwest, and

means/manner/instrumental prefixes in the California linguistic area (Mithun 2015). These examples provide a glimpse into the continent's diverse nominal classification systems, with the choice of a gender or classifier based on the referent's physical properties, position, or visibility: "[...] the sex principle [...] is merely one of a great many possible classifications of this kind." (Boas 1911: 37). The pervasive nature of these phenomena indicates long-term multilingualism and a relative absence of adult second-language learning (Mithun 2015; Trudgill 2017), while lexical borrowing appears to be rare (Mithun 2017b).

Despite considerable typological diversity, Mesoamerica is often cited as an example of a linguistic area according to the definition proposed by Nikolai S. Trubetzkoy (1890–1938) at the First International Congress of Linguists in The Hague in 1928 (Trubetzkoy 1930). The area is characterized by nominal possession constructions of the type 'his-dog the man', relational nouns, vigesimal numeral system, non-verb-final basic constituent order, and widespread semantic calques, as in 'head of leg' for 'knee'; other traits include locatives derived from body parts, clusivity, and final devoicing of sonorants (Campbell et al. 1986). However, Mesoamerican languages and cultures were profoundly changed by the Spanish conquest, heavily affecting the above-mentioned traits. Therefore, based on data from Nahuatl (Uto-Aztecan; Mexico) and Tének (or Huastec) (Mayan; Mexico), Dexter-Sobkowiak (2023) proposed the term 'Mestizo-American' linguistic area, as defined by such common traits as the replacement of the predicative oblique (existential) possessive with the verb 'have', relational nouns reinterpreted as prepositions, decimal number system, and SVO basic constituent order. While parallel changes were reported from other languages, e.g., Pipil (or Nawat) (Uto-Aztecan; El Salvador) by Campbell (1987), further research is needed to assess the areality of these features.

As Campbell (2012) admits, it is difficult to define a 'typical' South American language. Features that are often cited as common South American traits, e.g., polysynthesis, agglutination, and head marking, are not ubiquitous, and the same characteristic may vary considerably across languages.<sup>2</sup> Muysken (2012: 237) notes such recurring features as complex verbal morphology, agglutinative morphology, head marking, evidentials, nominal and verbal classifiers, possession marking on the possessum, and clause subordination through nominalization. Various types of classifiers are found in South America but Andean languages lack classifier systems (Adelaar 2008). Evidentiality is often associated with Amazonia, which

---

<sup>2</sup> Specific traits are discussed for Amazonia (Dixon & Aikhenvald 1999a: 7-9; Aikhenvald 2012: 382-391), the Andes (Adelaar 2008), and other areas (Campbell 2012: 299-309; Epps & Michael 2017; Aikhenvald 2022a).

“boast[s] the richest array of evidentials in the world” (Aikhenvald 2012: 248), while this category needs more investigation in the Andes (Adelaar 2008: 31). Evidentials and affixes marking the possessor on the possessum are found in most American languages in the Grambank dataset (Skirgård et al. 2023). Nominalization is a general feature of Amazonia (Aikhenvald 2012: 332-338), where it is typically used for subordinated clauses. While most South American languages use nominalization for relative, adverbial, and complement clauses (Krasnoukhova 2016), this does not occur everywhere in South America (see Campbell 2012: 278-279; Zariquiey et al. 2019).

While shared characteristics or forms may occur in unrelated languages, the distinction between genetic inheritance, contact or chance is a recurring issue, often intersecting the identification of past linguistic areas, particularly when little historical or archaeological information is available. For instance, there are some widespread forms throughout the Americas, so-called ‘pan-Americanisms’ (Campbell 1997: 257-259), analysed in Greenberg’s (1987) controversial mass comparison. The most famous one, the presence of *n* for 1st and *m* for 2nd person pronouns, had been noted long before Greenberg. Based on more recent studies, Zamponi (2017) concluded that this pronominal paradigm is only typical of North America. However, it remains unclear whether its unusual frequency in North America is due to contact or inheritance.

#### **4. American languages and linguistic theory**

The study of American languages has continuously informed linguistic theory by challenging methodological and theoretical assumptions based on more familiar languages. Beck & Gerds (2017) report grammatical topics that have contributed to various subfields of linguistics, including:<sup>3</sup>

- a) Phonetics/phonology: tonal phonology, vowel harmony, sound symbolism, phonological expression of the speaker’s gender;
- b) Morphology: polysynthesis, agglutination, reduplication, morphological metathesis, subtractive morphology, nasal suprafixation, tonal morphology;
- c) Syntax: word vs. sentence as the basic unit of linguistic analysis, noun incorporation, lexical affixes, noun-verb distinction, syntactic alignment (active/stative languages,

---

<sup>3</sup> See also Gordon (2017) on phonology, Zúñiga (2017) on morphosyntax, and Matthewson (2017) on semantics.

ergativity, hierarchical alignment, inverse systems), basic constituent order, obviation, switch reference, passives and antipassives, applicatives, nominalization, serial verbs, internally-headed relative clauses;

- d) Semantics: evidentiality, clusivity, classificatory verbs and other types of classifiers, encoding of position, location, and configuration.

Apart from widespread features, a fundamental contribution to our understanding of human language comes from rarities, illustrating the theoretical impact of descriptions of ‘small’ languages (Campbell 1997: 15-16).<sup>4</sup> A famous example is the OVS constituent order, considered impossible before it was documented in Hixkaryana (Cariban; Brazil) (Derbyshire 1977). Rarities may correlate with the usually small number of speakers of American languages. Indeed, Wohlgemuth (2010) notes that small languages tend to display more rare features. Skirgård et al. (2023) point out that unusual combinations of grammatical features are found in languages that do not belong to large language families and are possibly isolates, like various American languages. Rarities may also help distinguish inheritance from contact: Ciucci (2020) uses rare features from three families of the South American Gran Chaco (Guaycuruan, Mataguyan and Zamucoan) as a diagnostic tool for past contacts.

The impact of studies of American languages is also illustrated by novel ideas, perhaps the most controversial of which concerns linguistic relativity, often referred to as the ‘Sapir-Whorf Hypothesis’. This ‘hypothesis’, associated with the work of Edward Sapir (1884–1939) and Benjamin Lee Whorf (1897–1941), encompasses a “heterogeneous set of ideas and interpretations” (Joseph 2002: 72) relating to the influence of language structure on thought and culture. The ‘Eskimo words for snow’, its most familiar illustration, is the most famous example stemming from work on the languages of America (Kilarski 2021: Chapter 7). The ‘hypothesis’ continues to draw cross-disciplinary attention, as illustrated by the renewed interest following Lucy’s (1992) study of numeral classifiers in Yucatec (Mayan; Mexico) (for an overview see C. Everett 2017). More recently, following Daniel Everett (2005), the Amazonian language Pirahã featured as the most controversial example in debates on language complexity and the relations between language, culture, and biology. However, as in the ‘Eskimo words for snow’, fragmentary evidence was used to prove strong theoretical claims

---

<sup>4</sup> See, e.g., Campbell (2012) on South America, and Aikhenvald (2012) and Epps & Michael (2023, 1: xxxix-xvii) on Amazonia.

without much concern for the actual properties of the language(s) in question, similarly to earlier narratives about ‘exotic’ and ‘primitive’ languages.

## 5. Selected grammatical topics

We now briefly address a few grammatical features (among many) associated with American languages, which illustrate their ongoing contribution to typology and show continuity between the early missionary works and today’s studies, thus connecting past and present.

### 5.1. Polysynthesis

As mentioned above, polysynthesis is found in most North American languages and in many Mesoamerican and South American languages. Morphological complexity is typically located in verbs, which characterize an event or state together with the participants. Some of the discourse effects of such ‘holistic’ (Chafe 2004) expressions are illustrated in the beginning of a story in Seneca in (1). The referent is introduced in (1a) by a pronominal prefix in the verb and is specified further in (1b) by a noun. Verbs may contain incorporated noun roots, as in ‘bottle’ in (1d), nouns being used less frequently than in a non-polysynthetic language. Further information about the event is conveyed in (1a) and (1c) by particles of assertion, emphasis, and a hearsay evidential.

(1) Seneca (Iroquoian; New York State) (Chafe 2004: 39-40, glosses modified)

- |    |  |             |              |                |                              |
|----|--|-------------|--------------|----------------|------------------------------|
| a. | <i>Né:ʔ</i>                            | <i>nǎ</i>   | <i>gyóʔó</i> | <i>nónɛhji</i> | <i>wá:hdɛ:dí</i>             |
|    |  |             |              |                | <i>wa-ha-ahtɛti-ʔ</i>        |
|    | ASSERTION                              | EMPHASIS    | it.is.said   | long.ago       | FACTUAL-M.SG.AGT-set.out-PFV |
|    | <i>gyóʔó</i>                           | <i>néh,</i> |              |                |                              |
|    | it.is.said                             | (colon)     |              |                |                              |
|    | ‘It is said that long ago he set out,’ |             |              |                |                              |

- b. *hɔgweh*  
 h-ɔgwe-h  
 M.SG.AGT-person-STA  
 man  
 ‘a man’,
- c. *i:é* *gyóʔó* *néh,*  
 i-h-e-h  
 (empty)-M.SG.AGT-think-STA it.is.said (colon)  
 ‘he thought’
- d. *éʔgɔshéʔda:ni:nóʔ*  
 ɛ-hagɔ-sheʔda-hninɔ-ʔ  
 PREDICTIVE-3M.SG>3PL-bottle-buy-PFV  
 ‘he would buy them a bottle’ [...]

Apart from uncommon sounds and lexical differences, perhaps no other feature of North American languages has evoked such a broad spectrum of impressions, including ‘richness’ and ‘wealth’ vs. ‘poverty’ and ‘redundancy’. Already in the first grammatical accounts of Huron, Gabriel Sagard (c.1600–1650) mentioned the beauty and complexity of words (Sagard 1632), while Jean de Brébeuf (1593–1649) referred to the variety of ‘compound words’ as “the key to the secret of their language” (Thwaites 1897, 10: 117). The term ‘polysynthetic’ was introduced in 1816 by Peter Stephen Du Ponceau (1760–1844) with reference to a type of compounding that he considered a common property of American languages (Du Ponceau & Heckewelder 1819: 430). This statement was later questioned by John Napoleon Brinton Hewitt (1857–1937) (Hewitt 1893), along with such ideas that North American languages have “an enormous and useless excess of words” (Brinton 1886: 62) and that polysynthetic (or ‘incorporative’) languages lack syntactic organization. The last notion can be traced back to Wilhelm von Humboldt’s (1767–1835) account of *Einverleibung* (‘incorporation’) in Nahuatl (Humboldt 1836) and ultimately to Horacio Carocho’s (1579–1662) statement about the absence of syntax in the preface to his Nahuatl grammar (Carocho 1645). While studies of polysynthesis and related phenomena such as noun incorporation clearly had a profound influence on our understanding of linguistic complexity, the nature of words, the distinctions between grammar and lexicon, and morphology and syntax (see Fortescue et al. 2017), further historiographic work is needed on the complex development of these notions within the French, English, and Spanish linguistic traditions.



## 5.2. Locative classifiers

Missionary works also offer the earliest documentation of various types of classifiers found across America, which have only recently been integrated into comparative studies. A striking example is provided by the work done by the Episcopal missionary James Owen Dorsey (1848–1895) for the Bureau of Ethnology (from 1894 Bureau of American Ethnology) on Omaha-Ponca (Siouan; Nebraska and Oklahoma). His monumental collection of myths, stories, and letters (Dorsey 1890) contains examples of cross-linguistically uncommon locative and deictic classifiers, which, along with other elements, e.g., classificatory verbs of placing, grammaticalized from the positional verbs ‘sit’, ‘stand’, and ‘move’ (Rankin 2004). For example, locative classifiers in Omaha-Ponca appear with locative morphemes and classify the referent for animacy, position, and motion, among others; example (2) shows these classifiers for sitting (2a) and moving (2b) animates:

(2) Omaha-Ponca (Siouan) (Dorsey 1890: 109, 135; Rankin 2004: 216, glosses modified)

- a. *waž́íga ž́i-áxč́i ð́ikhé-di ábazú-biama*  
bird small-very CLF.SG.SITTING.ANIM-LOC pointed-they.say  
‘He pointed at the very small bird, they say.’
- b. *tte-ž́íga í ð́i-di uskáskaxti*  
bison-little come CLF.SG.MOVING.ANIM-LOC straight.line.INTENSIFIER  
‘In a straight line from the arriving buffalo calf [...].’

Dorsey’s documentation, including the notes on usage that accompany the text, contributed to our understanding of this rare type of classifiers in the context of other nominal classification devices, as illustrated, e.g., by Barron & Serzisko (1982) and other studies within the UNITYP project at the University of Cologne (cf. Seiler 1986), and more recent work on locative classifiers in South American languages, e.g., Palikur (Arawak; Brazil and French Guyana) (Aikhenvald & Green 1998).

### 5.3. Sociative causative

Sociative causation is a type of causation in which the causer is involved in the action performed by the causee. While in many languages this is a possible meaning of causative morphemes, several South American languages have a dedicated marker. The difference between a causative and a sociative causative is illustrated in (3) from Tupinambá (Tupi-Guarani, Tupian), spoken in Brazil until the 18th century.

(3) Tupinambá (Tupian) (Anchieta 1595: 48)

a. *a-mo-gebîr*

1SG-CAUSATIVE-go.back

‘I let him go back (without me).’

b. *a-ro-gebîr*

1SG-SOCIATIVE.CAUSATIVE-go.back

‘I let him go back (I am also going with him).’

Sociative causative morphemes are already addressed in the grammars of Tupinambá by Joseph de Anchieta (1534–1597) (Anchieta 1595: 48-49) and Old Mapudungun (or Mapuche) (Araucanian) by Luis de Valdivia (1561–1642) (Valdivia 1887 [1606]: 44-45). Based on missionary descriptions, Rodrigues (1953: 136) called the sociative causative of Tupinambá *voz causativo comitativa* ‘comitative-causative voice’ and the term has since been used in studies of Tupian languages. The category was also called ‘causative of involvement’ (Dixon 2000) and ‘sociative causation’ (Shibatani & Pardeshi 2002: 96-97). Guillaume & Rose (2010), the first typological survey, identified sociative causative markers as a possible South American areal feature. Further evidence was provided by Pöllänen (2022). Sociative causation needs further investigation outside South America, where only two languages with dedicated markers are known: Alamblak (Sepik; Papua New Guinea) and Wolof (Atlantic-Congo; Senegal).

### 5.4. Predicative inflection

Missionary studies sometimes reveal new construction types. Non-verbal predication is often encoded by an inflection on the non-verbal predicate. Cross-linguistically, there are two types

of predicative inflection constructions. The first type (A), corresponding to Hengeveld’s (1992) “zero-1” strategy, is the most frequent and well-known one: the non-verbal predicate receives predicative exponents, which are often copula-like or resemble verbal inflection, as in (4) from Chiquitano (or Bésiro) (Bolivia; isolate or Macro-Jê).

(4) Chiquitano (Lomeriano variety; LC fieldwork)

- a. *áxiñi maixhtru-ñi*  
 1SG teacher-1SG  
 ‘I am a teacher’
- b. *ñáнку-kĩ?*  
 who-2SG  
 ‘Who are you?’

Thus, in type A the non-verbal predicate (often including pronouns and adverbial expressions) exhibits additional morphology. By contrast, in type B (absent in Hengeveld (1992)), the predicate (usually a noun or adjective) tends to be zero-marked – except for possible diachronic changes – while the arguments host overt exponents. In other words, type A marks the predicate while type B marks the non-predicative function. Example (5) shows type B in Old Zamuco, a Zamucoan language documented by the Jesuit missionary Ignace Chomé (1696–1768): ‘forest’ is the predicate in (5a) and takes the zero-marked “predicative form”, while in (5b), as an object, it displays the “argument form” suffix *-itie*.

(5) Old Zamuco (Ciucci forthcoming)

- a. *ore amarai-tie erap*  
 3PL delight-M.SG.ARG forest[M.SG.PRED]  
 ‘Their delight (is) the forest.’
- b. *ore ch-inorâ eram-itie*  
 3PL 3.REALIS-be.delighted.with forest-M.SG.ARG  
 ‘They are delighted with the forest.’

Type B, which is typical of the small Zamucoan family (Bolivia, Paraguay), is rare world-wide but occurs in many Tupí-Guaraní languages and emerges for the first time in the historical data

on Tupinambá (see Bertinetto et al. (2019), the first typological analysis of this construction). More cross-linguistic investigation is needed to identify type B and understand its distribution in and beyond America (cf. Bertinetto et al. forthcoming).

### 5.5. Associated motion

Associated motion is a grammatical category that encodes motion on a generally non-motion verb (Guillaume & Koch 2021a: 3). Example (6) is from Cavineña (Takanan; Bolivia).

(6) Cavineña (Guillaume 2016: 82)

<i>ba-</i>	‘see’
<i>ba-ti-</i>	‘ <u>go</u> and see’
<i>ba-na-</i>	‘ <u>come</u> and see’
<i>ba-aje-</i>	‘see while <u>going</u> ’
<i>ba-be-</i>	‘see while <u>coming</u> ’
<i>ba-kena-</i>	‘see and <u>go</u> ’

Although instances of associated motion are already described in Ludovico Bertonio’s (1557–1625) Aymara grammar (Bertonio 1603: 285-286), the category was identified by Koch (1984), who introduced the term for Kaytetye (Arandic, Pama-Nyungan; Australia). Associated motion remained essentially confined to Australian linguistics until Guillaume’s (2000) investigation of Cavineña. Guillaume (2016) found associated motion markers in 23 among 36 (64%) genetic groupings surveyed in South America. Associated motion is also widespread in North and Central America (Dryer (2021) and various languages worldwide (Guillaume & Koch 2021b). While associated motion needs further investigation, it is also a highly diffusible feature that can help understand past language contacts (Guillaume & Koch 2021a).

## 6. Conclusions and perspectives

After a brief overview of Indigenous American languages (§2-3) and their contribution to language studies (§4), we exemplified the connection between early descriptions and present research through selected grammatical topics (§5) that were observed in missionary grammars and later became the object of cross-linguistic research, allowing for the definition of new

categories and features. The impact of Americanist studies on linguistics, as recognized by Wallace Chafe (1927–2019), is due to the continuous documentation of typologically diverse languages:

It is impossible to know what American linguistics would be like if it had not grown up where it could have firsthand experience of both the range of variation and the degree of commonality among human languages, but without any doubt it would be much different – and certainly much impoverished. (Chafe 1976: 5)

Further description is urgent (cf. §2). Among the 897 American languages in Hammarström et al. (2023), 185 (20.6%) lack a grammatical sketch. At the same time, documentation is an ongoing enterprise. The “Grammar highlights”, which appeared over the last five years in *Linguistic Typology* (see, e.g., Rosés Labrada 2023), report no fewer than 15 reference grammars of American languages published from 2018 to 2022, but the number of descriptions is higher if we add dissertations and grammatical sketches. Our knowledge has progressed thanks to institutions and societies such as the Bureau of (American) Ethnology mentioned in §5.2, SIL International (formerly the Summer Institute of Linguistics), the Society for the Study of the Indigenous Languages of the Americas, and the Endangered Languages Documentation Programme, among others (cf. Mithun 2022b).

Description is also essential for diachronic studies. The noteworthy genetic and typological diversity of American languages poses the challenge of identifying their distant genetic relationships and contact history, particularly in South America, where the number of families and isolates is higher (cf. Michael 2021). As part of their contribution to historical linguistics, new data refined the comparative method (cf. Beck 2017), highlighted the limitations of mass comparison (à la Greenberg 1987), and are a testing ground for phylogenetic methods (cf. Greenhill 2023).

Ongoing research must also deal with emerging varieties. Well-known examples of mixed languages include Michif in the northern Plains (Bakker 1997) and Media Lengua in Ecuador (Lipski 2017). Innovative varieties are often spoken by younger generations under the influence of a national language, e.g., Muruiño, a Murui variety (Witotoan; northwest Amazonia, Colombia and Peru) affected by Spanish (Wojtylak 2021). Contact may only involve Indigenous languages: the young speakers of Tariana (Arawak; Brazil) in northwest Amazonia use Tucano (Tucanoan; Brazil, Colombia) daily, resulting in a new variety influenced by the latter (Aikhenvald 2022b). Finally, new sign languages are emerging (Le Guen et al. 2021). While communication by signs in what is known as Plains Indian Sign Language (or Plains Sign Talk) was already mentioned in early reports from the Gulf Coast

and Texas from the 16th century (Taylor 1996), sign languages have traditionally received little attention and their study will offer new perspectives to explore human language.

## Abbreviations

1, 2, 3 first, second, third person; AGT agent; ANIM animate; ARG argument form; CLF classifier; LOC locative; M masculine; PFV perfective; PL plural; PRED predicative form; SG singular; STA stative.

## Acknowledgments

We are grateful to Pier Marco Bertinetto, Elwira Dexter-Sobkowiak, Antoine Guillaume, and Karin Michelson for comments on earlier versions of this paper and to Alexandra Y. Aikhenvald, Wolf Dietrich, Françoise Rose, and Søren Wichmann for their useful suggestions. LC acknowledges the support of the FIAS Fellowship Programme co-funded by the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 945408.

## References

- Adelaar, Willem F.H. 2008. "Towards a typological profile of the Andean languages", in: Alexander Lubotsky, Jos Schaecken, Jeroen Wiedenhof, Rick Derksen & Sjoerd Siebinga (eds.), *Evidence and counter-evidence: Essays in honour of Frederik Kortlandt*. Vol. 2. *General linguistics*. Leiden: Brill, 23-33.
- Adelaar, Willem F.H. 2012. "Historical overview: Descriptive and comparative research on South American Indian languages", in: Lyle Campbell & Verónica Grondona (eds.), *The indigenous languages of South America: A comprehensive guide*. Berlin: De Gruyter Mouton, 1-57.
- Adelaar, Willem F.H. 2022. "South American Indian languages", in: *Oxford bibliographies online: Linguistics*. Oxford: Oxford University Press. (DOA: 24 Feb. 2024). (<https://doi.org/10.1093/OBO/9780199772810-0040>).
- Adelaar, Willem F.H. with Pieter C. Muysken. 2004. *The languages of the Andes*. Cambridge: Cambridge University Press.

- Aikhenvald, Alexandra Y. 2012. *The languages of the Amazon*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2022a. “The Amazon Basin: Linguistic areas and language contact”, in: Salikoko S. Mufwene & Anna María Escobar (eds.), *The Cambridge handbook of language contact*. Vol. 1. *Population movement and language change*. Cambridge: Cambridge University Press, 232-260.
- Aikhenvald, Alexandra Y. 2022b. “Innovation and change in a multilingual context: The Innovative Tariana language in northwest Amazonia”, in: Cynthia Groff, Andrea Hollington, Ellen Hurst-Harosh, Nico Nassenstein, Jacomine Nortier, Helma Pasch & Nurenzia Yannuar (eds.), *Global perspectives on youth language practices*. Berlin: Mouton de Gruyter, 121-136.
- Aikhenvald, Alexandra Y. & Diana Green. 1998. “Palikur and the typology of classifiers”, *Anthropological Linguistics* 40, 3: 429-480.
- Anchieta, Joseph de. 1595. *Arte de grammatica da lingoa mais usada na costa do Brasil*. Coimbra: Antonio de Mariz.
- Bakker, Peter. 1997. *A language of our own: The genesis of Michif, the mixed Cree-French language of the Canadian Métis*. Oxford: Oxford University Press.
- Barron, Roger & Fritz Serzisko. 1982. “Noun classifiers in Siouan languages”, in: Hansjakob Seiler & Franz Josef Stachowiak (eds.), *Apprehension. Das sprachliche Erfassen von Gegenständen*. Vol. 2. *Die Techniken und ihr Zusammenhang in Einzelsprachen*. Tübingen: Gunter Narr, 85-105.
- Beck, David. 2017. “The contribution of a century of Americanist studies to historical linguistics”, *International Journal of American Linguistics* 83, 3: 447-466.
- Beck, David & Donna B. Gerds. 2017. “The contribution of research on the languages of the Americas to the field of linguistics”, *International Journal of American Linguistics* 83, 1: 7-39.
- Bertinetto, Pier Marco, Luca Ciucci & Denis Creissels (eds.). forthcoming. *Non-verbal predication in the world's languages: A typological survey*. Berlin & New York: De Gruyter Mouton.
- Bertinetto, Pier Marco, Luca Ciucci & Margherita Farina. 2019. “Two types of morphologically expressed non-verbal predication”, *Studies in Language* 43, 1: 120-194.
- Bertonio, Ludovico. 1603. *Arte y grammatica muy copiosa de la lengua aymara*. Rome: Luis Zannetti.

- Boas, Franz. 1911. "Introduction", in: Franz Boas (ed.), *Handbook of American Indian languages*. Vol. 1. Washington, D.C.: Smithsonian Institution, 1-83.
- Brinton, Daniel G[arrison]. 1886. "On polysynthesis and incorporation as characteristics of American languages", *Proceedings of the American Philosophical Society* 23, 121: 48-86.
- Campbell, Lyle. 1987. "Syntactic change in Pipil", *International Journal of American Linguistics* 53, 3: 253-280.
- Campbell, Lyle. 1997. *American Indian languages: The historical linguistics of Native America*. Oxford: Oxford University Press.
- Campbell, Lyle. 2012. "Typological characteristics of South American indigenous languages", in: Lyle Campbell & Verónica Grondona (eds.), *The indigenous languages of South America: A comprehensive guide*. Berlin: De Gruyter Mouton, 259-330.
- Campbell, Lyle. 2013. *Historical linguistics: An introduction*. (3rd edition.) Edinburgh: Edinburgh University Press.
- Campbell, Lyle & Verónica Grondona (eds.). 2012. *The indigenous languages of South America: A comprehensive guide*. Berlin: De Gruyter Mouton.
- Campbell, Lyle, Terrence Kaufman & Thomas C. Smith-Stark. 1986. "Meso-America as a linguistic area", *Language* 62, 3: 530-570.
- Carochi, Horacio. 1645. *Arte de la lengua mexicana con la declaracion de los adverbios della*. Mexico City: Juan Ruiz.
- Chafe, Wallace L. 1976. "Preface", in: Wallace L. Chafe (ed.), *American Indian languages and American linguistics: Papers of The Second Golden Anniversary Symposium of the Linguistic Society of America, held at the University of California, Berkeley, on November 8 and 9, 1974*. Lisse: Peter de Ridder, 5-7.
- Chafe, Wallace L. 2004. "Discourse effects of polysynthesis", in: Carol Lynn Moder & Aida Martinovic-Zic (eds.), *Discourse across languages and cultures*. Amsterdam & Philadelphia: John Benjamins, 37-52.
- Ciucci, Luca. 2020. "Matter borrowing, pattern borrowing and typological rarities in the Gran Chaco of South America", *Morphology* 30: 283-310.
- Ciucci, Luca (ed.). forthcoming. *Ignace Chomé: Vocabulario de la lengua zamuca – Edición crítica y comentario lingüístico*. Madrid & Frankfurt am Main: Iberoamericana Vervuert.



- Dagostino, Carmen, Marianne Mithun & Keren Rice (eds.). 2023-2024. *The languages and linguistics of Indigenous North America: A comprehensive guide*. 2 vols. Berlin & Boston: De Gruyter Mouton.
- Derbyshire, Desmond C. 1977. "Word order universals and the existence of OVS languages", *Linguistic Inquiry* 8, 3: 590-599.
- Derbyshire, Desmond C. & Geoffrey K. Pullum (eds.). 1986-1998. *Handbook of Amazonian languages*. 4 vols. Berlin: Mouton de Gruyter.
- Dexter-Sobkowiak, Elwira. 2023. Language contact in the Huasteca: The impact of Spanish on Nahuatl and Tének. [Unpublished PhD dissertation, University of Warsaw.]
- Dietrich, Wolf (ed.). 2022. *Las lenguas indígenas de América*. (<https://www.uni-muenster.de/Romanistik/Organisation/Lehrende/Dietrich/LingAmerSud.html>)
- Dixon, R.M.W. 2000. "A typology of causatives: form, syntax and meaning", in: R.M.W. Dixon & Alexandra Y. Aikhenvald (eds.), *Changing valency: Case studies in transitivity*. Cambridge: Cambridge University Press, 30-83.
- Dixon, R.M.W. & Alexandra Y. Aikhenvald. 1999a. "Introduction", in: R.M.W. Dixon & Alexandra Y. Aikhenvald (eds.), *The Amazonian languages*. Cambridge: Cambridge University Press, 1-22.
- Dixon, R.M.W. & Alexandra Y. Aikhenvald (eds.). 1999b. *The Amazonian languages*. Cambridge: Cambridge University Press.
- Dorsey, James Owen. 1890. *The Cegiha language*. Washington, D.C.: Government Printing Office.
- Dryer, Matthew S. 2021. "Associated motion in North America (including Mexico and Central America)", in: Antoine Guillaume & Harold Koch (eds.), *Associated motion*. Berlin: De Gruyter Mouton, 485-526.
- Du Ponceau, Peter Stephen & John Heckewelder. 1819. "A correspondence between the Rev. John Heckewelder, of Bethlehem, and Peter S. Duponceau, Esq. corresponding secretary of the Historical and Literary Committee of the American Philosophical Society, respecting the languages of the American Indians", *Transactions of the Historical and Literary Committee of the American Philosophical Society* 1: 351-448.
- Eberhard, David M., Gary F. Simons & Charles D. Fennig (eds.). 2023. *Ethnologue: Languages of the world*. (26th edition.) Dallas, Tex.: SIL International. (<http://www.ethnologue.com>)

- England, Nora C. & Roberto Zavala Maldonado. 2022. “Indigenous languages of the Americas”, in: *Oxford bibliographies online: Linguistics*. Oxford: Oxford University Press. (DOA: 24 Feb. 2024). (<https://doi.org/10.1093/OBO/9780199772810-0080>).
- Epps, Patience & Lev Michael. 2017. “The areal linguistics of Amazonia”, in: Raymond Hickey (ed.), *The Cambridge handbook of areal linguistics*. Cambridge: Cambridge University Press, 878-933.
- Epps, Patience & Lev Michael (eds.). 2023. *Amazonian languages: An international handbook*. 2 vols. Berlin: De Gruyter Mouton.
- Everett, Caleb. 2017. “From patterns in language to patterns in thought: Relativity realized across the Americas”, *International Journal of American Linguistics* 83, 1: 173-201.
- Everett, Daniel L. 2005. “Cultural constraints on grammar and cognition in Pirahã: Another look at the design features of human language”, *Current Anthropology* 46, 4: 621-646.
- Fabre, Alain (ed.). 2005-2023. *Diccionario etnolingüístico y guía bibliográfica de los pueblos indígenas sudamericanos*. (<http://www.ling.fi/DICCIONARIO.htm>)
- Fortescue, Michael, Marianne Mithun & Nicholas Evans (eds.). 2017. *The Oxford handbook of polysynthesis*. Oxford: Oxford University Press.
- Goddard, Ives. 1996. “Introduction”, in: Ives Goddard (ed.), *Languages*. (Handbook of North American Indians 17.) Washington, D.C.: Smithsonian Institution, 1-16.
- Gordon, Matthew K. 2017. “Phonetic and phonological research on American Indian languages: Past, present, and future”, *International Journal of American Linguistics* 83, 1: 79-110.
- Greenberg, Joseph H. 1987. *Language in the Americas*. Stanford: Stanford University Press.
- Greenhill, Simon J. 2023. “Language phylogenies: modelling the evolution of language”, in: Jamshid J. Tehrani, Jeremy Kendal & Rachel Kendal (eds.), *The Oxford handbook of cultural evolution*. Oxford: Oxford University Press. (DOA: 22 Nov. 2023). (<https://doi.org/10.1093/oxfordhb/9780198869252.013.61>).
- Guillaume, Antoine. 2000. “Directionals versus associated motions in Cavineña”, in: Alan K. Melby & Arle L. Lommel (eds.), *LACUS Forum XXVI: The lexicon*. Fullerton, Calif.: LACUS, 395-401.
- Guillaume, Antoine. 2016. “Associated motion in South America: Typological and areal perspectives”, *Linguistic Typology* 20, 1: 81-177.
- Guillaume, Antoine & Harold Koch. 2021a. “Introduction: Associated motion as a grammatical category in linguistic typology”, in: Antoine Guillaume & Harold Koch (eds.), *Associated motion*. Berlin: De Gruyter Mouton, 3-30.

- Guillaume, Antoine & Harold Koch (eds.). 2021b. *Associated motion*. Berlin: De Gruyter Mouton.
- Guillaume, Antoine & Françoise Rose. 2010. “Sociative causative markers in South-American languages: A possible areal feature”, in: Franck Floricic (ed.), *Essais de typologie et de linguistique générale: Mélanges offerts à Denis Creissels*. Lyon: ENS Éditions, 383-402.
- Hammarström, Harald, Robert Forkel, Martin Haspelmath & Sebastian Bank (eds.). 2023. *Glottolog 4.8*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (<http://glottolog.org>).
- Hengeveld, Kees. 1992. *Non-verbal predication: Theory, typology, diachrony*. Berlin & New York: De Gruyter.
- Hewitt, J[ohn] N[apoleon] B[rinton]. 1893. “Polysynthesis in the languages of the American Indians”, *American Anthropologist* 6, 4: 381-407.
- Humboldt, Wilhelm von. 1836. *Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts*. Berlin: Dümmler.
- Joseph, John E. 2002. “The sources of the ‘Sapir-Whorf Hypothesis’”, in: John E. Joseph, *From Whitney to Chomsky: Essays in the history of American linguistics*. Amsterdam & Philadelphia: John Benjamins, 71-105.
- Kilarski, Marcin. 2021. *A history of the study of the Indigenous languages of North America*. Amsterdam & Philadelphia: John Benjamins.
- Koch, Harold. 1984. “The category of ‘associated motion’ in Kaytej”, *Languages in Central Australia* 1: 23-34.
- Koerner, E. F. K[onrad]. 2002. *Toward a history of American linguistics*. London: Routledge.
- Krasnoukhova, Olga. 2016. “Noun phrase (NP)”, in: Pieter Muysken, et al. (ed.), *South American Indian language structures (SAILS) online*. Jena: Max Planck Institute for the Science of Human History. (<https://sails.clld.org>) (DOA: 11 Nov. 2023).
- Le Guen, Olivier, Josefina Safar & Marie Coppola (eds.). 2021. *Emerging sign languages of the Americas*. Berlin: De Gruyter Mouton.
- Lipski, John M. 2017. “Ecuadoran Media Lengua: More than a ‘half’-language?”, *International Journal of American Linguistics* 83, 2: 233-262.
- Lucy, John A. 1992. *Grammatical categories and cognition: A case study of the linguistic relativity hypothesis*. Cambridge: Cambridge University Press.

- Maddieson, Ian, Caroline L. Smith & Nicola Bessell. 2001. "Aspects of the phonetics of Tlingit", *Anthropological Linguistics* 43, 2: 135-176.
- Matthewson, Lisa. 2017. "Semantics in indigenous American languages: 1917–2017 and beyond", *International Journal of American Linguistics* 83, 1: 141-172.
- Michael, Lev. 2021. "The classification of South American languages", *Annual Review of Linguistics* 7: 329-349.
- Michelson, Karin. 2016. "Iroquoian languages", in: *Oxford research encyclopedia of linguistics*. Oxford: Oxford University Press. (DOA: 12 March 2024). (<https://doi.org/10.1093/acrefore/9780199384655.013.47>).
- Mithun, Marianne. 1996. "Overview of general characteristics", in: Ives Goddard (ed.), *Languages*. (Handbook of North American Indians 17.) Washington, D.C.: Smithsonian Institution, 137-158.
- Mithun, Marianne. 1999. *The languages of Native North America*. Cambridge: Cambridge University Press.
- Mithun, Marianne. 2015. "Morphological complexity and language contact in languages indigenous to North America", *Linguistic Discovery* 13, 2: 37-59.
- Mithun, Marianne. 2017a. "Polysynthesis in North America", in: Michael Fortescue, Marianne Mithun & Nicholas Evans (eds.), *The Oxford handbook of polysynthesis*. Oxford: Oxford University Press, 235-259.
- Mithun, Marianne. 2017b. "Native North American languages", in: Raymond Hickey (ed.), *The Cambridge handbook of areal linguistics*. Cambridge: Cambridge University Press, 878-933.
- Mithun, Marianne. 2022a. "Indigenous languages of the Americas", in: *Oxford bibliographies online: Linguistics*. Oxford: Oxford University Press. (DOA: 24 Feb. 2024). (<https://doi.org/10.1093/OBO/9780199772810-0004>).
- Mithun, Marianne. 2022b. "Native American languages at the threshold of the new millennium", in: Igor Krupnik (ed.), *Introduction*. (Handbook of North American Indians 1.) Washington, D.C.: Smithsonian Institution, 265-277.
- Muysken, Pieter. 2012. "Contacts between indigenous languages in South America", in: Lyle Campbell & Verónica Grondona (eds.), *The indigenous languages of South America: A comprehensive guide*. Berlin: De Gruyter Mouton, 235-258.
- Pöllänen, Roosa. 2022. Sociative causative in South American languages: Formal-functional analysis. [Unpublished MA thesis, University of Helsinki.]

- Rankin, Robert L. 2004. “The history and development of Siouan positionals with special attention to polygrammaticalization in Dhegiha”, *STUF – Language Typology and Universals* 57, 2/3: 202-228.
- Rice, Keren. 2020. “Phonological inventories”, in: Daniel Siddiqi, Michael Barrie, Carrie Gillon, Jason D. Haugen & Éric Mathieu (eds.), *The Routledge handbook of North American languages*. New York: Routledge, 3-33.
- Rodrigues, Arion Dall’Igna. 1953. “Morfologia do verbo Tupi”, *Letras* 1: 121-152.
- Rosés Labrada, Jorge Emilio. 2023. “Grammar highlights 2022”, *Linguistic Typology* 27, 3: 745-752.
- Sagard, Gabriel Theodat. 1632. *Le grand voyage du pays des Hyrons, situé en l’Amérique vers la Mer douce, és derniers confins de la nouvelle France, dite Canada*. Paris: Denys Moreav.
- Seiler, Hansjakob. 1986. *Apprehension: Language, object, and order*. Vol. 3: *The universal dimension of apprehension*. Tübingen: Gunter Narr.
- Sherzer, Joel. 1976. *An areal-typological study of American Indian languages north of Mexico*. Amsterdam: North-Holland.
- Shibatani, Masayoshi & Prashant Pardeshi. 2002. “The causative continuum”, in: Masayoshi Shibatani (ed.), *The grammar of causation and interpersonal manipulation*. Amsterdam & Philadelphia: John Benjamins, 85-126.
- Siddiqi, Daniel, Michael Barrie, Carrie Gillon, Jason D. Haugen & Éric Mathieu (eds.). 2020. *The Routledge handbook of North American languages*. New York: Routledge.
- Skirgård, Hedvig et al. 2023. “Grambank reveals the importance of genealogical constraints on linguistic diversity and highlights the impact of language loss”, *Science Advances* 9, eadg6175.
- Suárez, Jorge A. 1983. *The Mesoamerican Indian languages*. Cambridge: Cambridge University Press.
- Taylor, Allan R. 1996. “Nonspeech communication systems”, in: Ives Goddard (ed.), *Languages*. (Handbook of North American Indians 17.) Washington, D.C.: Smithsonian Institution, 275-289.
- Thwaites, Reuben Gold (ed.). 1897. *The Jesuit relations and allied documents: Travels and explorations of the Jesuit missionaries in New France, 1610-1791*. Vol. 10. Cleveland, Ohio: Burrows Bros.
- Trubetzkoy, N[ikolai S.]. 1930. “Proposition 16”, *Actes du premier Congrès international de linguistes à La Haye, du 10-15 avril 1928*. Leiden: Sijthoff, 17-18.

- Trudgill, Peter. 2017. “The anthropological setting of polysynthesis”, in: Michael Fortescue, Marianne Mithun & Nicholas Evans (eds.), *The Oxford handbook of polysynthesis*. Oxford: Oxford University Press, 186-202.
- Valdivia, Luis de. 1887 [1606]. *Arte, vocabulario y confessionario de la lengua de Chile*. Leipzig: Teubner.
- Wichmann, Søren (ed.). 2024. *The languages and linguistics of Mexico and Northern Central America: A comprehensive guide*. Berlin & Boston: De Gruyter Mouton.
- Wohlgemuth, Jan. 2010. “Language endangerment, community size and typological rarity”, in: Jan Wohlgemuth & Michael Cysouw (eds.), *Rethinking universals: How rarities affect linguistic theory*. Berlin: De Gruyter Mouton, 255-277.
- Wojtylak, Katarzyna I. 2021. “Language contact and change: The case of Muruiñoiz from northwest Amazonia”, *Italian Journal of Linguistics* 33, 1: 135-156.
- Zamponi, Raoul. 2017. “First-person *n* and second-person *m* in Native America: A fresh look”, *Italian Journal of Linguistics* 29, 2: 189-230.
- Zariquiey, Roberto, Masayoshi Shibatani & David W. Fleck (eds.). 2019. *Nominalization in languages of the Americas*. Amsterdam and Philadelphia: John Benjamins.
- Zúñiga, Fernando. 2017. “On the morphosyntax of indigenous languages of the Americas”, *International Journal of American Linguistics* 83, 1: 111-139.
- Zwartjes, Otto. 2012. “The historiography of missionary linguistics: Present state and further research opportunities”, *Historiographia Linguistica* 39, 2/2: 185-242.