

Matthias Urban

Linguistic Stratigraphy

Recovering Traces of Lost Languages in
the Central Andes

 Springer

Linguistic Stratigraphy

Matthias Urban

Linguistic Stratigraphy

Recovering Traces of Lost Languages
in the Central Andes

 Springer

Matthias Urban
Center for Advanced Studies 'Words,
Bones, Genes, Tools'
University of Tübingen
Tübingen, Germany

ISBN 978-3-031-42101-3 ISBN 978-3-031-42102-0 (eBook)
<https://doi.org/10.1007/978-3-031-42102-0>

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2023

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Paper in this product is recyclable.

Acknowledgments

Work on this book was supported by grants number UR 310/1–1 and UR 310/1–2 from the Deutsche Forschungsgemeinschaft (German Research Foundation, DFG). My sincere thanks to an anonymous reviewer for providing detailed and helpful comments.

Contents

1 Linguistic Stratigraphy, Or How to Recover Traces of Lost Languages	1
References	4
2 The Central Andean Linguistic Landscape Through Time and the Quechuan Language Family	5
2.1 The Ever-Changing Cultural and Linguistic Landscapes of the Central Andes	5
2.2 Quechuan Today	7
2.3 The Classification of Quechuan	11
2.4 The Quechuan Expansion	12
2.5 The Non-Quechuan Linguistic Diversity	14
References	20
3 Evidence and Methods for Investigating Substratal Languages	25
3.1 Introduction	25
3.2 Toponyms and Anthroponyms	28
3.3 Substrate Influence	36
3.4 Substrate Vocabulary	38
3.5 Extralinguistic Evidence	40
3.6 Summary	40
References	42
4 The Aymara Presence in Southern Peru	45
4.1 Introduction	45
4.2 Toponymy	47
4.3 Substrate Effects	49
4.4 Substrate Vocabulary	58
4.5 Perspectives from Outside Linguistics	66
4.6 Summary	66
References	67

5	The Barbacoan Languages and the Southern Ecuadorian Highlands	71
5.1	Introduction	71
5.2	Toponymy	80
5.2.1	Characteristic Toponymy of Cañar and Azuay	80
5.2.2	Continuous Northward Extensions of Cañar and Azuay Toponymic Endings	82
5.2.3	Noncontinuous Northward Extensions of Cañar and Azuay Toponymic Endings to the Ecuadorian-Colombian Border	89
5.2.4	Northward Extensions of Phonological Characteristics of Cañar and Azuay Toponyms	94
5.2.5	Evaluation of the Toponymic Evidence	96
5.3	Substrate Effects	98
5.4	Substrate Vocabulary	102
5.5	Summary	108
	References	110
6	Chachapoyas	115
6.1	Introduction	115
6.2	Toponymy	120
6.3	Substrate Effects	127
6.4	Substrate Vocabulary	133
6.5	Perspectives from Outside Linguistics	135
6.6	Summary	136
	References	137
7	Synopsis and Conclusion	141
	References	144
	Index	145

About the Author

Matthias Urban is principal investigator of the Junior Research Group “The Language Dynamics of the Ancient Central Andes”, hosted by the University of Tübingen and funded by the German Research Foundation (DFG)’s Emmy Noether Program. Having held prior appointments at the universities of Leiden, Marburg, and the Max Planck Institute for Evolutionary Anthropology in Leipzig, his research interests include historical linguistics, in particular of the Andes, language contact, and linguistic typology.

Chapter 1

Linguistic Stratigraphy, Or How to Recover Traces of Lost Languages



Abstract This opening chapter introduces the notion of linguistic stratigraphy. This is understood as the study of traces of languages, including undocumented ones, that are no longer spoken because at some earlier point of time, its speakers have shifted to another language that has newly arrived in the relevant part of the world. The chapter argues that such episodes are likely a common phenomenon in human linguistic history. Maintaining the consistent metaphoric comparison with archaeology implied by the term stratigraphy, the chapter also introduces the notion of “Sprachdenkmäler,” literally “language monuments,” as a cover term for three types of traces that such languages may leave and that can be studied even after they have disappeared: toponyms (placenames), contact-induced changes in the sound structure and grammar of the expanding language that can be attributed to imperfect language learning in the context of language shift, and vocabulary items that have been transferred to the expanding language and that tend to survive in certain semantic domains. Historical linguistics and contact linguistics have developed pieces of the analytic machinery that is necessary to study these phenomena, but these have not been put together to build a consistent framework. The chapter introduces such a framework as a general methodological contribution and anticipates how that framework will be applied to case studies concerning the Central Andes.

Keywords Linguistic stratigraphy · Sprachdenkmäler · Language shift · Toponyms · Substrate · Contact-induced language change

Language shift and replacement have been a major factor in known language history, and what is known is likely just the tip of the iceberg of a much deeper and protracted history of language replacement in human prehistory.

This is significant for a number of reasons: for one, we cannot assume that—as linguistic typology has only recently been coming to realize—observed present-day linguistic diversity, which is only a minute fraction of all languages that have ever existed, is representative of possible human languages writ large. And for the linguistic history of individual regions, it means that we must reckon with the existence of previous layers of linguistic diversity that are not readily accessible, but that included languages that, regionally or on larger scales, may have played a significant

role earlier. These lost languages may be related to languages that are still spoken in the same region or elsewhere, or their genealogical history may be completely unrelated to them.

Language shift and replacement are not nearly as frequently theorized as the expansions and diversification of language families. Reconstructing such processes, especially when the identity of the replaced languages is not known, is fraught with methodological difficulties (cf. Ross, 2003): undocumented languages that are no longer spoken are not accessible by standard, time-tested methods of historical or contact linguistics, even though both offer the analytical seeds to attempt to make them so.

Still, for various parts of the world, interest in understanding the dynamics of language expansion and language replacement in more complex, multifaceted, and realistic ways than just theorizing language expansions is increasing in recent years. In this vein, this book aims to provide a principled framework to make aspects of lost languages accessible through three distinct types of traces they may leave and that may remain visible long after they have ceased to be spoken.

As elsewhere in historical linguistics, work on Indo-European linguistic prehistory can furnish some precedents and methodological orientations. In fact, it is Indo-Europeanists who have been most active in exploring contributions of now lost languages to the Indo-European newcomers whose languages ultimately replaced them. For instance, Schrijver (2007 [2001]) explores a set of bird names that show up in different European branches of Indo-European, that do not have cognates in languages further to the east, and that suggest to Schrijver a common pre-Indo-European source. Salmons (1992: 267) provides criteria for the identification of such “substrate” vocabulary in the context of Indo-European more generally.

Stratigraphy provides an apt metaphor for the resulting distributions. In archeology, deeper strata in the record of anthropogenic remains may, other things being equal, be assumed to represent remains of earlier times. By comparing them with later ones, cultural continuities, as well as discontinuities, become visible. This book, in contrast, is about the layered stratigraphy of culture as it pertains to language. Like in archeology, underneath the present-day distribution of languages one can glimpse traces of earlier strata: On the one hand, the lexicon and grammatical structure of languages may bear the imprint of a pre-existing language that was spoken in the same area at an earlier—or, to stay in the metaphor of stratigraphy, deeper—point of time. As Lass (1997: 184–185) puts it beautifully, “[t]he palimpsest that makes up the observable surface of a language is rarely (if ever) entirely the result of its own internal history. As least in part, either superficial like lexis, or ‘deeper’ in structure will likely be the scars of encounters with other languages.” On the other hand, perhaps comparable to surface deposits in archeology, place names around the world have a tendency to be conservative in situations of language shift and often betray the former presence of a language in an area—inscribed in the landscape and the names of its landmarks and features—even when it is no longer spoken (Urban, 2018).

Adopting a venerable term from the German linguistic tradition, in this book I will call the three types of remnants of disappeared languages *Sprachdenkmäler* (singular *Sprachdenkmal*), literally “language monuments.” This term is formidably

compatible with the metaphor of linguistic stratigraphy in particular when one thinks of archeologically established cultural stratigraphies as the modeling analogon. Like archeological monuments are manifest witnesses of past cultures, these linguistic monuments are manifest, if sometimes hard to find, testimonies of the presence of past languages which make their presence known through them.

The book is not only a methodological contribution, however. Beginning already as part of the methodological explorations of Chap. 3, I explore how *Sprachdenkmäler* allow us to explore aspects of the linguistic prehistory of one part of the world where language shift must have played a particularly decisive role in shaping linguistic history: the Central Andes of South America.

Chapter 2 introduces the Central Andes and its linguistic landscape generally, but with particular reference to the Quechuan language family, whose expansion has given the region a treacherous impression of relative linguistic homogeneity. Chapter 3 then returns to methodological explorations of the three types of *Sprachdenkmäler*, treating toponyms and anthroponyms in Sect. 3.2, substrate effects in phonology and grammar in Sect. 3.3, and substrate vocabulary in Sect. 3.4.

Chapters 4, 5, and 6 then explore how, and to what extent, the different types of evidence and criteria can create hypotheses as to the identity of the replaced languages in Southern Peru and Bolivia, the southern Ecuadorian highlands, and the Chachapoyas on the eastern slopes of Northern Peru, and thus to (partially) reconstruct the linguistic landscape of the Central Andes prior to the late phases of Quechuan spread. Pertinent issues associated with the situation in one of these areas, Southern Peru and Bolivia, are well-known and much discussed in the historical linguistics of the Quechuan family and the Central Andes at large. The other areas have only recently begun to be explored. It is thus opportune to begin the assessment with the most well-studied region of the three that this book will investigate, and to explore how the different types of evidence have been employed to uncover earlier pre-Quechuan language distributions there. To anticipate a major conclusion of the book, the success with which this can be done varies. I believe that this is no accident, but that it is a general characteristic of this type of work that it can be more successfully carried out in some parts of the world than in others. Still, analyses of *Sprachdenkmäler* with the framework proposed here should also be applicable to other regions of the Central Andes and indeed, possibly with some adaptations to make them align with the specifics of the respective language ecologies, also other parts of the world. What could be learned, and what problematic aspects remain unresolved, is summarized in the synopsis in the final Chap. 7 of this book that closes the discussion.

References

- Lass, R. (1997). *Historical linguistics and language change*. Cambridge University Press.
- Ross, M. (2003). Diagnosing prehistoric language contact. In R. Hickey (Ed.), *Motives for language change* (pp. 174–198). Cambridge University Press. <https://doi.org/10.1017/CBO9780511486937.012>
- Salmons, J. (1992). Northwest Indo-European vocabulary and substrate phonology. In *Perspectives on Indo-European language, culture and religion: Studies in honor of Edgar C. Polomé* (vol. 2, pp. 265–279). Institute for the Study of Man.
- Schrijver, P. (2007 [2001]). Lost languages in northern Europe. In C. Carpelan, A. Parpola, & P. Koskikallio (Eds.), *Early contacts between Uralic and Indo-European: Linguistic and archaeological considerations. Papers presented at an international symposium held at the Tvärminne Research Station of the University of Helsinki 8–10 January, 1999* (pp. 417–425). Suomalais-Ugrilainen Seura.
- Urban, M. (2018). *Sprachlandschaften: Über die Rolle von Sprache in der Beziehung zwischen Mensch und Umwelt*. Königshausen & Neumann.

Chapter 2

The Central Andean Linguistic Landscape Through Time and the Quechuan Language Family



Abstract This chapter provides a brief introduction to the culture history of the Central Andes, which is chequered and multifaceted. It emphasizes that there is a cultural palimpsest in which old and new elements coexist along each other, and links that to the observation that the same is true linguistically. The chapter then introduces Quechuan, the Andean language family with the largest geographical spread and the greatest number of speakers, discusses its internal classification, and traces the developments that led to its remarkable scope. The chapter shows that in many of the regions in which Quechuan is today spoken as the principal or only Indigenous language there is evidence that, sometimes until quite recently, other languages were once spoken, and that the Quechuan presence is but a relatively thin layer under which now lost diversity can be found. The chapter also discusses what is known about that non-Quechuan diversity, much of which has been further reduced in the meantime, and the state of affairs that can be reconstructed for earliest historical times.

Keywords Quechuan · Language expansion · Language classification · Language geography

2.1 The Ever-Changing Cultural and Linguistic Landscapes of the Central Andes

The Central Andes have entered a unique cultural trajectory toward societal complexity starting almost 5000 years ago. Since then, they have seen the rise and fall of pre-Columbian civilizations and empires again and again; they have then endured the horrors of the *conquista* and seen the establishment of the colonial Spanish regime; and its people are now more and more absorbed into the global economy and culture.

It is no surprise that, as a result of this chequered and multifarious culture history, a truly complex layering of cultural patterns has come into being in this culturally precocious region. Some inherited cultural traditions have been, and still are, slowly replaced by more recently established practices. Yet, other old cultural traditions

continue to coexist with more recently established ones and, often in a transformed or reinterpreted form, survive until the present day.

The ever-changing nature of this cultural fabric is visible everywhere. It can be seen in the adoption of bowler hats as part of the typical outfit of the Indigenous women of the Central Andes. It can be seen when *despachos*, the traditional offerings made to Andean deities, today include, alongside coca leaves and llama fat, dollar notes and store-bought candy. In immaterial culture, it can be seen when the story of Juan el Oso, which has European origins, is transformed and acquires distinctly Andean overtones and meanings (e.g., Marín-Dale, 2016; Morote Best, 1988 [1957]). But the layering of old and new in Central Andean cultural traditions is not restricted to the colonial period, and in fact is a consistent hallmark of the culture history of the region since prehistoric times. Thus, it can equally well be seen when, in spite of cataclysmic periods of natural disaster and societal collapse, elements of cultural traditions, though often transformed and imbued with new meaning, survived on the North Coast of Peru as one pre-Columbian culture succeeded another (see, e.g., Bawden, 1995; Malpass, 2016: 196; Shimada, 1994: 261 for some examples). In the southern part of the Central Andes, the iconography of the so-called Staff God is a persistent expression of religious beliefs and practices across cultural ruptures (Isbell & Knobloch, 2008; Quilter, 2012). In fact, the strong cultural continuity of certain archeologically visible expressions of culture through millennia, in spite of drastic societal changes and upheavals (see Isbell, 2018), is a striking characteristic of the Central Andes.

In terms of language, arguably the most important Indigenous language family of the Andes is Quechuan. Linguistically, the differences between local varieties of Quechuan speech are not great. This indicates that the family is of relatively recent age, and that it has not been long ago that the regional variation developed from a common ancestor that must have been much more localized than the family is today. This means that Quechuan is but a shallow stratigraphic layer that overlays a deeper, and likely more diverse and regionalized, linguistic history. Indeed, we can assume that the arrival of Quechuan in some (but not all!) parts of the Central Andes probably occurred only in times of the Inca empire, which is visible in the archeological stratigraphy of the Central Andes as the so-called Late Horizon. Therefore, we have good reason to suspect that Quechuan superseded other languages that were spoken formerly in these regions and that were, either rapidly or in a more protracted process of language shift, replaced by expanding Quechuan speech.

In its empirical part, the present book presents an attempt to use regional features in local Quechuan varieties and local toponymy to infer something about language distributions that were in place before the arrival of Quechuan. Given the particularly close entanglement between language and culture history that obtains in the Central Andes, by establishing the stratigraphy of the linguistic record, also the culture history of this center of pristine civilization is enriched by more facets: the stratigraphic dynamics of language expansion and shift through time is, like the succession of archeological cultures as established by archeological stratigraphy, informative of demographic and/or cultural changes that the Central Andes underwent. In particular, using this methodology, we can hope to learn more on the linguistic aspect of

cultural diversity in the Central Andes as it existed before the politically and culturally unifying force of Inca hegemony that correspond to the times immediately prior to the so-called Late Horizon, the Late Intermediate Period.

Importantly, like the coexistence between old and new in the culture history of the Central Andes, the Quechuan case is likely only really special in that it is the most recent episode, or layer, in the linguistic palimpsest of the Central Andes, and in being a particularly large-scale one, but not otherwise remarkable qualitatively. In fact, there is evidence that not much earlier, another language family, Aymaran, spread through parts of the Central Andes and in the process absorbed the Puquina language and probably other languages of Southern Peru and the altiplano (some aspects of this are covered in Chap. 3).

The analysis of Quechuan language data is, in the present context, not a goal in itself, but rather a tool that is applied in the service of elucidating the identity of the replaced languages. At its essence, it is these languages which the book is about. However, given that the analysis of Quechuan material is central to the goal, the remainder of this introductory section is dedicated to a more detailed overview of the Quechuan language family as it exists today (Sect. 2.2), its classification (Sect. 2.3), its expansion (Sect. 2.4), and how that expansion relates to the linguistic landscape of the Central Andes of the earliest colonial times (Sect. 2.5).

2.2 Quechuan Today

When looking at a map of Indigenous languages like that in Fig. 2.1, it is easily verifiable that characterizations of Quechuan as the most important Indigenous language family of the Andes are well-founded. Stretching more than 3000 kms from southern Colombia to northern Argentina, it covers a more extensive area than any other Andean language family. A significant percentage of the Indigenous people of the Andes as a whole is thus Quechuan-speaking. While counts as to the number of speakers are fraught with problems and must be taken with more than just one grain of salt (Cerrón-Palomino, 2003 [1987]: 75; Adelaar, 2014: 4–5), rough estimates reach as high as seven or eight and a half million (Adelaar, 2014: 3; Adelaar & Muysken, 2004: 619–620; Cerrón-Palomino, 2003 [1987]: 76). About half of these speakers live in Peru, which, as we will see shortly, is the historic and current center of gravity of the Quechuan family; the remainder are distributed over the countries to the north and the south, with Ecuador and Bolivia having higher speaker numbers than the still more peripheral countries Colombia and Argentina (Adelaar, 2014: 4). The Quechuan lects of the department of Cuzco in Southern Peru and those of Bolivia in particular boast high number of speakers, and these closely related lects actually form one of the Indigenous languages with most speakers in South America at large.

As one can see from the map in Fig. 2.1, too, in spite of the formidable geographic spread, Quechuan-speaking areas are not always continuous. Likewise in a more scattered than continuous manner, its distribution is interspersed by areas in which other,