

# Valence Changes in Zapotec

Synchrony, diachrony, typology

*edited by Natalie Operstein  
and Aaron Huey Sonnenschein*

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## **Volume 110**

Valence Changes in Zapotec. Synchrony, diachrony, typology  
Edited by Natalie Operstein and Aaron Huey Sonnenschein

# Valence Changes in Zapotec

Synchrony, diachrony, typology

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## CHAPTER 1

# Foreword

## Rethinking perspectives in typology

Leonid Kulikov

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The volume the readers hold in their hands focuses on valence-changing categories in the Zapotec languages – a group of closely related Mesoamerican languages, which are spoken by nearly half-a-million people and constitute one of the branches of the Oto-Manguean language family. The present volume offers of course a valuable addendum to the ample database of transitivity and valence-changing, and, with this, it might pass unnoticed among dozens of studies dealing with this particular domain of the linguistic system, – quite a popular topic of linguistic research. But the contribution of this book does not amount to this addendum – it offers much more to linguists.

In order to clarify this point, it might be advisable to take a closer look at the state-of-affairs in linguistic typology.

The last decades are marked with considerable progress in the typological study of several linguistic categories. The voice- and valence-related categories, such as causative, applicative or reciprocal, are not exceptional, instantiating probably one of the most flowering domains and one of the favourite objects of study within this branch of linguistics. Our knowledge of valence-changing categories as well as, to put it in more general terms, the domain of transitivity oppositions, is accumulated in such works as Lazard (1998), Dixon & Aikhenvald (eds) 2000, Kittilä (2002), Næss (2007), Nichols, Peterson & Barnes (2004), to mention just a few, let alone such impressive compendia as Nedjalkov et al. (2007), a five-volume encyclopaedia of reciprocals. Evidence gathered in this field creates a solid basis for understanding the structure and functioning of these linguistic categories, their status within the linguistic system and their interaction with other domains.

This pertains, foremost, to the **synchronic** properties of these categories. There is, however, a regrettable imbalance between synchronic and diachronic typological research in the field. The results achieved in the domain of **diachronic** typology are much more limited. The mechanisms and scenarios of the rise, development and decline of linguistic categories mostly remain on the periphery of typological research.

The need in diachronic typological research was noticed already by the pioneers of modern linguistic typology. From the very beginning of the large-scale typological studies onward, linguists have been interested in diachronic processes and mechanisms determining fundamental changes in morphological and syntactic structures (cf., for instance, Hoenigswald 1966; Greenberg 1969; Bybee 1988; see Bickel 2007 for a comprehensive survey), and a number of important results relevant for diachronic typology have been obtained, in particular, in the domain of grammaticalization theory. Nevertheless, the bulk of evidence available from historical grammars and text corpora was used by typologists much less systematically than evidence from synchronic grammars. As Paolo Ramat (1987: 3) observes when discussing approaches to linguistic typology, “[t]he historical dimension is nearly always omitted”.

It is only natural that a diachronic typological study should start with collecting evidence from languages (language groups) with a history well-documented in texts for a sufficiently long period of time (around 1000 years or more). When approaching the history of a particular valence-changing category, such as the reciprocal, passive or causative, it might be useful to outline some kind of a historically oriented **group (family) portrait**, or **profile**, for the relevant category, tracing it from the earliest attested texts in an ancient language ( $L_0$ ) onwards up to its reflexes in the daughter languages ( $L_1$ ,  $L_2$  etc.). Of particular interest would also be – if available – evidence from the sister languages of  $L_0$  ( $L'$ ,  $L''$  etc.), which can serve as a basis for a tentative reconstruction of the hypothetical history and possible sources of the categories under study in the proto-language  $*L$ , as shown in Figure 1:

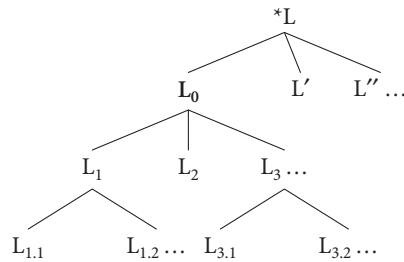


Figure 1. Language family tree:  $L_0$  with its sister and daughter languages

Thus, several groups of the Indo-European or Semitic language families appear to be nearly ideal candidates for such a diachronic typological study of several linguistic categories, including voice and valence-changing categories.

Here belongs, for instance, the Indo-Aryan branch of Indo-European, which attests an uninterrupted documented history for a period of more than 3.000 years, starting with Old Indo-Aryan that can be roughly identified with (Vedic) Sanskrit.

Likewise, more than 2,500 years of the well-documented history of the Italic/Romance languages (starting with Latin) or more than 1,500 years of the equally well-attested history of the Germanic languages provide solid bases for diachronic observations.

Unfortunately, such an ideal scheme is represented (that is, documented in texts) only for a few language families. There are relatively few languages for which we have at our disposal textual evidence for the period sufficient to observe essential changes in morphological systems and syntactic types (for instance, 1000 years or more). The limited diversity of historical evidence available accounts for the relatively scant material for diachronically oriented typological generalizations. This, eventually, must explain the aforementioned imbalance of synchronic and diachronic typology (which is of course not confined to the typology of valence-changing categories).

In particular, while synchronic linguistics has at its disposal the material of hundreds of languages of various genetic affiliations, the diversity of evidence for diachronic typology is confined to structural types instantiated by relatively few historically well-documented languages. Most of these languages belong to a few major language families located in the mainstream of the development of the “Eurasia-centered” human culture, foremost to the Indo-European and Sino-Tibetan families as well as the Afro-Asiatic macro-family. Somewhat scarcer is diachronic evidence available from a few families that are relatively well-documented historically, such as Turkic, Dravidian, Austronesian or Kartvelian. Finally, diachronic evidence from the rest of the language families, which include structurally more different genetic phyla of African, Amerindian, Australian and Oceanic languages, virtually amounts to zero.

The languages under discussion in the present volume belong to this latter category and thus, at first glance, offer little for “balanced” – that is, both synchronically and diachronically founded – typological observations. The documented history of Zapotec, with the earliest documentation dated no earlier than the last fourth of the 16th century, is quite scant. This means that, in terms of the scheme in Figure 1, only evidence from the lower level ( $L_{1,1}$ ,  $L_{1,2}$ ,  $L_2$ ,  $L_{3,1}$ ,  $L_{3,2}$ , etc.) is directly available for linguistic research. All (or nearly all) claims about the higher levels will therefore be asterisked – that is, they can only be based on historical reconstruction.

There is one such chapter in the volume, dedicated to the reconstructed history of the Zapotec causative (Chapter 15, “Verb inflection and valence in Zapotec languages”, by Natalie Operstein), and this issue is further elaborated by the same author in a separate recent article (Operstein 2014). However, the bulk of historical evidence from Zapotec – leaving aside relatively scarce data obtainable from comparing the earliest language documentation a few centuries ago with present-day languages – remains unavailable to the eyes of researchers.

Nevertheless, the approach instantiated by this volume opens the way to a quite balanced typological picture of valence in Zapotec languages that is valid from both

synchronic and diachronic perspectives, even in spite of the scantiness of diachronic evidence.

This is due to the fact that the authors (and, particularly, the editors) of the volume pay special attention to a typological characterization of a rather homogenous group of genetically related languages, which show a relatively high level of “diachronic transparency”. Next to a general survey of all valence-changing categories in Zapotec offered by Natalie Operstein in Chapter 3, there is an overview of an individual category, reciprocal (Pamela Munro, Chapter 14). Furthermore, several authors focus on causatives (Joseph Benton in Chapter 7, “Valence-changing operations in Coatecas Altas Zapotec”; John Foreman & Sheila Dooley in Chapter 12, “Causative morphology in Macuiltianguis Zapotec”), applicatives (Aaron Broadwell in Chapter 5, “Valence-changing morphology in San Dionisio Ocotepec Zapotec”) and other categories in individual Zapotec languages. Finally, a convenient summary of the typological profile of Zapotec in the domain of valence-changing categories is given in the final chapter of this volume, Chapter 16 “Valence change: general and Zapotec perspectives”, written by Seppo Kittilä, one of the leading experts in transitivity phenomena.

In general, it turns out that such an approach makes possible a comparison of evidence available from diachronic typological research of languages or language families with well-documented history with genetic groups that furnish little or no direct diachronic evidence – even in spite of the lack or limited character of historical documentation of the language or language group under study.

All in all, this approach can be considered a particular variety of a typological research, which one might label “**genetically oriented typology**”. Different from both canonical synchronic typology (based on a large and/or representative language sample instantiating structurally distinct and genetically (mostly) unrelated types) and from diachronic typology (that necessarily requires the availability of ample historical documentation from languages with well-attested written history), this approach focuses on evidence available from one (structurally rather coherent) language group or family. The output of such genetically oriented typological research, a *typological profile*, provides linguists with a valuable picture outlining a particular domain of the linguistic system that is valid for all or, at least, for the majority of genetically related languages and therefore, in a sense, can be projected into the past of these languages. Most importantly, such a profile allows for different perspectives, depending of the goals of further research; it can be oriented either synchronically or diachronically (historically). This eventually opens the way to a synthesis of synchronic and diachronic data obtainable from a study of the given language group.

The importance of such a synthesis has been repeatedly noticed by scholars – suffice it to mention seminal papers by Kiparsky (1968) or Greenberg (1979) (see also, most recently, Sinnemäki 2014); yet the ambitious program outlined in these studies is still quite far from its completion.



The approach represented by this book is an important step towards this synthetic perspective in linguistic typology. On the one hand, even in spite of the lack of considerable structural diversity in such analysis, the typological profile as outlined in this book can be put in contrast with other, structurally different and genetically unrelated language families within a synchronic perspective. On the other hand, observations on a group of genetically related languages whose historical relationships are still quite transparent, together with elements of historical reconstruction, prompt a number of non-trivial hypotheses on the origins and evolution of the categories under study.

Materials brought to light by genetically oriented typological studies – a fine specimen of which is instantiated by the present volume – can supply missing links of the chain that will help to build the bridge between synchronic and diachronic typological research (on whose necessity see, in particular, Kulikov 2010). This, together, will contribute to better understanding of both synchronic and diachronic typological mechanisms, filling in several lacunae in the complicated picture of the interplay of synchronic and diachronic mechanisms and considerably increasing the explanatory force of our typological models.

Thus far, surprisingly, few monographic studies have appeared that present similar typological overviews, or profiles, of genetically related languages in the domain of voice, valence-changing and transitivity. The few books of this genre I am aware of include a collective monograph on transitivity and voice (diathesis) in Romance languages Geisler & Jacob 1998; two collections of papers on voice in Austronesian languages (Wouk & Ross 2002 and Arka & Ross 2005) as well as a few monographic studies on voice and voice-related categories such as Guxman 1964 (for Germanic) or Norman 1972 (for Slavic).

I can only express a hope that this volume will be followed by further publications using a similar perspective and offering typological profiles of other language families – primarily of those which only offer limited access to the mysteries of language change and linguistic history.

## References

- Arka, I Wayan & Ross, Malcolm (eds). 2005. *The Many Faces of Austronesian Voice Systems: Some New Empirical Studies*. Canberra: Pacific Linguistics.
- Bickel, Balthasar. 2007. Typology in the 21st century: Major current developments. *Linguistic Typology* 11(1): 239–251. DOI: 10.1515/LINGTY.2007.018
- Bybee, Joan L. 1988. The diachronic dimension in explanation. In *Explaining Language Universals*, John Hawkins (ed.), 350–379. Oxford: Blackwell.
- Dixon, Robert M.W. & Aikhenvald, Alexandra Y. (eds). 2000. *Changing Valency: Case Studies in Transitivity*. Cambridge: CUP. DOI: 10.1017/CBO9780511627750

- Geisler, Hans & Daniel, Jacob (eds). 1998. *Transitivität und Diathese in romanischen Sprachen* [Linguistische Arbeiten 392]. Tübingen: Niemeyer. DOI: 10.1515/9783110912470
- Greenberg, Joseph H. 1969. Some methods of dynamic comparison in linguistics. In *Substance and Structure of Language*, Jaan Puhvel (ed.), 147–203. Berkeley CA: University of California Press.
- Greenberg, Joseph H. 1979. Rethinking linguistics diachronically. *Language* 55(2): 275–290. DOI: 10.2307/412585
- Guxman, Mirra Moiseevna. 1964. *Razvitie zalogovyx protivopostavlenij v germanskix jazykax: Opyt istoriko-tipologičeskogo issledovanija rodstvennyx jazykov* (The development of voice oppositions in Germanic languages: an historic and typological study of genetically related languages). Moskva: Nauka.
- Hoenigswald, Henry M. 1966. Are there universals of linguistic change? In *Universals of Language*, Joseph H. Greenberg (ed.), 30–52. Cambridge MA: The MIT Press.
- Kittilä, Seppo. 2002. *Transitivity: Towards a Comprehensive Typology*. Åbo: Åbo Akademis Tryckeri.
- Kiparsky, Paul. 1968. Linguistic universals and linguistic change. In *Universals in Linguistic Theory*, Emmon Bach & Robert T. Harms (eds), 171–202. New York NY: Holt, Rinehart & Winston.
- Kulikov, Leonid. 2010. Bridging typology and diachrony: a preliminary questionnaire for a diachronic typological study of voice and valency-changing categories. In *Problemy grammatiki i tipologii: sbornik statej pamjati Vladimira Petroviča Nedjalkova (1928–2009)* (Issues in grammar and typology: a memorial volume for Vladimir Nedjalkov), Valentin F. Vydrin, Sergej Ju. Dmitrenko, Natal'ja M. Zaika, Sergej S. Saj, Nina R. Sumbatova & Viktor S. Xrakovskij (eds), 139–163. Moscow: Znak.
- Lazard, Gilbert. 1998. *Actancy*. Berlin: Mouton de Gruyter. DOI: 10.1515/9783110808100
- Næss, Åshild. 2007. *Prototypical Transitivity* [Typological Studies in Language 72]. Amsterdam: John Benjamins. DOI: 10.1075/tsl.72
- Nedjalkov, Vladimir P. (with the assistance of Emma Š. Geniušienė & Zlatka Guentchéva) (eds). 2007. *Reciprocal Constructions* [Typological Studies in Language 71]. Amsterdam: John Benjamins. DOI: 10.1075/tsl.71
- Nichols, Johanna, Peterson, David A. & Barnes, Jonathan. 2004. Transitivity and detransitivizing languages. *Linguistic Typology* 8(2): 149–211. DOI: 10.1515/lity.2004.005
- Norman, Boris Justinovič. 1972. *Perexodnost', zalog, vozvratnost' (na materiale bolgarskogo i drugix slavjanskix jazykov)* (Transitivity, voice, reflexivity (evidence from Bulgarian and other Slavic languages)). Minsk: Izdatel'stvo BGU.
- Operstein, Natalie. 2014. Origin of the Zapotec causative marker \*k-: a diachronic-typological perspective. *International Journal of American Linguistics* 80: 99–114. DOI: 10.1086/674162
- Ramat, Paolo. 1987. *Linguistic Typology*. Berlin: De Gruyter. DOI: 10.1515/9783110859126
- Sinnemäki, Kaius. 2014. Cognitive processing, language typology, and variation. *Wiley Interdisciplinary Reviews: Cognitive Science* 5: 477–487. DOI: 10.1002/wcs.1294
- Wouk, Fay & Ross, Malcolm (eds). 2002. *The History and Typology of Western Austronesian Voice Systems*. Canberra: Australian National University, Research School of Pacific and Asian Studies.

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