

Book Review

Review of **Sonia Cristofaro** and **Fernando Zúñiga** (eds.). 2018. *Typological hierarchies in synchrony and diachrony*. (Typological Studies in Language 121.) Amsterdam, Philadelphia: John Benjamins — vi, 434 p. ISBN 978 90 272 0026 6

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Hierarchies have played an important role in both grammatical theorizing and linguistic typology since the 1970s, when such influential work as Silverstein (1976) and Keenan and Comrie (1977) appeared (see Corbett 2010 for an overview). In particular, the so-called “animacy hierarchy” or “referential hierarchy” shown in (1) has been invoked to explain cross-linguistic distributions of nominal number (Smith-Stark 1974), accusative and ergative case marking (Silverstein 1976 and much subsequent work), patterns of verbal agreement and direct-inverse marking (Comrie 1979 and much subsequent work), the use of voice constructions and anaphoric expressions (Kuno and Kaburaki 1977), and some other empirical phenomena.

- (1) The animacy hierarchy:
1st and 2nd person > 3rd person > proper names and kinship
terms > humans > animates > inanimates

The referential hierarchy has served not only as a powerful means of formulating typological universals but also as a tool for analyzing language-particular phenomena (see e.g., Kibrik 1997 on verb agreement patterns in Alutor, as well as Optimality-theoretic work like Aissen 1999), from both functionalist and generative perspectives (see e.g., the recent volume Bornkessel-Schlesewsky et al. 2015 and its discussion in Arkadiev 2017a).

While one of the important theoretical notions in modern linguistics, hierarchies and hierarchy-based explanations have been repeatedly scrutinized and criticized. First, as has been evident almost from the outset, different languages and even different phenomena in the same language may be sensitive to different versions of the same hierarchy, thus a distinction is necessary between language-specific (and construction-specific) and cross-linguistic hierarchies, the two not being identical (see e.g., Haspelmath 2015). Second, as has been shown in a growing body of work (Bickel 2008; Filimonova 2005 etc.), cross-linguistic distributions of concrete phenomena which had been both invoked to support claims

about hierarchies and explained with recourse to them are not nearly as neat and unequivocal as has been thought before. Third, as has been claimed at least since Garrett (1990), effects attributed to hierarchies can often be better accounted for by diachronic processes, which, when properly understood, can explain the patterns adhering to hierarchies as well as the counterexamples – and, last but not least, the inevitable variation of language- and construction-specific hierarchies.

The volume under review mainly addresses precisely the last issue, i.e., whether typological hierarchies, primarily the referential hierarchy, can still be considered valid tools of linguistic theorizing or whether their effects are merely epiphenomena of language-particular diachronic processes. The book consists of an Introduction by the editors and 12 chapters organized into four parts. The first part (“Setting the stage”) contains the Introduction, itself a chapter on its own entitled “Synchronic vs. diachronic approaches to typological hierarchies” (pp. 3–27). Here the authors present a very useful overview of the main issues related to typological hierarchies and set the theoretical background for the various contributions to the volume. The concise summaries of the latter are integrated into the appropriate thematic subsections of the article, which makes the Introduction more coherent, even if complicating the task of those readers who wish to have a quick glimpse of the contents of the volume. The topics addressed include the frequent discrepancy between synchronic accounts of language-specific phenomena or cross-linguistic distributions grounded in typological hierarchies and diachronic motivations of these same phenomena; the role of the properties of source constructions and analogical extension in the shaping of synchronically observable patterns, both supporting the hierarchies and contradicting them; the issue of multiple diachronic origins of similar structures as well as of combined diachronic processes through which particular structures emerge, implying not only cross-linguistic variation, but, importantly, the lack of any overarching principle guiding the development and synchronic shape of resulting patterns; and lastly, the problem of exceptions to hierarchy-based generalizations and accounting for them in synchronic and diachronic terms.

The authors make a number of important observations deserving to be quoted. First, on p. 11 they observe that “[i]n many cases, the emergence of the distributional patterns described by typological hierarchies is not obviously related to principles pertaining to the synchronic properties of the distribution”, that is, to principles adduced by linguists analyzing these distributions in a *post hoc* fashion. With regard to multiple diachronic origins of particular grammatical configurations, the authors write on p. 18 that “the factors that motivate these configurations cannot be read off from the configuration in itself, because different processes, motivated in terms of different principles, can all lead to the same configuration, and this is not apparent at the synchronic level”, and hence, as they continue on

p. 19, “explanations for individual patterns should be based not so much on these patterns in themselves, but rather on what source constructions and developmental processes can give rise to the patterns, and the relative frequency of these constructions and processes cross-linguistically”. On p. 22 the authors state “first, that the synchronic properties of particular configurations cannot be taken as evidence for any explanatory principle in particular, because they may be compatible with multiple origins, and, second, that these configurations may not be theoretically significant in themselves, because different instances of the configuration might be motivated differently”. Finally, from a methodological perspective, on p. 23 the authors observe that “this does not rule out that the patterns captured by typological hierarchies may ultimately be shaped by principles related to the synchronic properties of those patterns, as assumed in traditional explanations”, however, “[t]o the extent that individual patterns are a result of specific diachronic processes [...] these principles should be proved to play a role in these processes, and cannot be postulated based on the synchronic evidence alone”. All this I consider to be an important take-home message for both typologists and theoretical linguists (see also Haspelmath 2019 for a discussion of similar and more general issues).

The remaining 12 chapters of the volume are grouped into three sections called “Foundational issues” (chapters 1–3), “Hierarchical effects and their origins” (chapters 4–9) and “Conflicting hierarchical patterns and how to deal with them” (chapters 10–12). Most of the chapters present fairly detailed historical case studies of individual languages or groups of related languages, mainly Amerindian and Tibeto-Burman, but four papers are cross-linguistic in their coverage. With the exception of the two chapters from Part I, all contributions deal with different aspects of the referential hierarchy as given in (1), mainly with its effects on verbal person marking and the category of inverse.

Part I starts with the article “Evolutionary Phonology and the life cycle of voiceless sonorants” (pp. 31–58) by Juliette Blevins, which stands out in the volume as the only chapter devoted to phonology rather than to morphosyntax. The paper addresses the question of the extreme rarity of voiceless vowel phonemes as opposed to voiceless sonorant phonemes, which occur in a fair number of languages, and especially to voiceless obstruents, which are very common cross-linguistically. While possibly obvious from the point of view of the so-called sonority hierarchy (“vowels > sonorants > obstruents”), the answer to this question becomes less straightforward when historical and phonetic evidence is taken seriously. As Blevins claims, as allophones of modal segments, voiceless sonorants and vowels “are extremely common in the world’s languages” (p. 32), frequently arising through devoicing in contact with voiceless obstruents. However, both voiceless sonorants and especially voiceless vowels resist

phonologization, and this is what requires explanation. Blevins shows that the most common source of voiceless sonorants and vowels is co-articulations with a preceding or following laryngeal /h/, whose loss may theoretically result in phonologization. However, while for voiceless sonorants there is enough cross-linguistic evidence of preservation, voiceless vowels tend to be either lost or maintained only as allophones of modal vowels in specific positions. Blevins argues that this is due to the rarity of situations when not only HV or VH clusters exist as source constructions in the first place, but, importantly, when new clusters arise in the same phonological environment, thus triggering the emergence of a non-allophonic contrast between voiceless and voiced vowels. As regards the word-final position, another cross-linguistically recurrent source of devoicing, here voiceless vowels, in contrast to voiceless sonorants, are virtually inaudible and tend to be lost — or, remarkably, maintained as “ghost-like articulations” (p. 48) by analogy with vowelful variants of the same morphemes or words. In conclusion, Blevins states that an evolutionary analysis of these phenomena is superior to an account in terms of a markedness hierarchy in explaining both the phonological and phonetic facts.

The lengthy chapter “The Obligatory Coding Principle in diachronic perspective” (p. 59–109) by Denis Creissels does not, in fact, say much about typological hierarchies as such, but makes a number of strong arguments in favour of diachronic explanations in alignment typology. The Obligatory Coding Principle states that “all verbal predicative constructions in a given language must include a nominal term showing a particular type of coding” (p. 73), either obligatory A coding (in morphologically accusative alignment) or obligatory P coding (in morphologically ergative alignment). The bulk of the article is devoted to a discussion of various diachronic processes leading to exceptions to the Obligatory Coding Principle, such as reanalysis of passive and antipassive constructions leading to shifts in argument coding, grammaticalization of various tense-aspect-mood categories leading to alignment splits, conventionalization of argument ellipsis or univertation of light verb compounds leading to the emergence of split-S coding. The data illustrating these different cases comes from such languages as Inuktitut, Kurmanji, Russian and its dialects, Romance, Amharic, Akhvakh, and most notably from Basque, which is represented in a number of more or less detailed case studies. Crucially lacking, in my view, is a reference to the case of Aramaic, where different paths of alignment change are well-documented and have been recently amply discussed in Coghill (2016).

Marianne Mithun in “Deconstructing teleology: The place of synchronic usage patterns among processes of diachronic development” (p. 111–128) examines the relation between typology and diachrony with respect to the referential hierarchy on the basis of such phenomena as development of number categories, verbal

person marking and alignment splits in a number of languages of North America. She shows that while in relatively simple single-step developments such as evolution of the dual category in the Northern Iroquoian languages “implicational hierarchies might indeed shape language change” (p. 115), they fail to either guide or constrain more complex diachronic processes involving multiple changes. Thus, the common lack of overt markers of third person on verbs often results from the absence of third person pronouns from which such markers could develop rather than from any cognitive or frequency-related effects of the hierarchy. Likewise, observable putative hierarchy-based patterns of split case-marking of agents are historically motivated by such well-known processes as reanalysis of instruments as agents in the context of zero third person agents or extension and ensuing reanalysis of passive constructions under appropriate discourse conditions related to topic continuity.

The remaining chapters of the volume mainly center around historical developments observable or rather reconstructible in particular languages or groups of languages. Thus, Spike Gildea and Joana Jansen in the methodologically solid and empirically rich contribution “The development of referential hierarchy effects in Sahaptian” (p. 131–189) provide a detailed reconstruction of the history of the very complex alignment system of Sahaptian languages, famous for an interplay of hierarchy effects in a number of constructions. By reconstructing the whole diversity of Proto-Sahaptian constructions rather than individual morphemes or some underlying “base” system, the authors show how several different mechanisms, only some of which can be considered functionally motivated, have created the apparently hierarchy-based patterns of argument encoding in the family. As the authors state on p. 174, “nearly all hierarchical patterns in personal indexation and verbal morphology appear not to be created in response to sensitivity to some universal hierarchy, but rather to have arisen by ordinary historical changes that just happened to result in patterns that can be interpreted as hierarchical”. In a similar way, Guillaume Jacques and Anton Antonov in “The direction(s) of analogical change in direct/inverse systems” (p. 257–288) review the changes in person and direct-inverse marking in the Algonquian languages and propose a number of generalizations regarding the direction of analogical change (p. 284), such as the extension from 3→3 forms to forms involving speech act participants (SAP), analogy first applying to plural SAP forms before influencing singular SAP forms, and affecting 3→SAP forms before SAP→3 forms. It remains to be seen to what extent the less trivial of the generalizations valid for the history of the Algonquian family extend to other languages.

“Diachrony and the referential hierarchy in Old Irish” (p. 191–215) by Aaron Griffith discusses a very interesting case of a hierarchy effect in person indexing in an old Indo-European language. In Old Irish, there existed a special series of clitic

person markers called *notae augentes* in the Celtological tradition, which were optionally used to reinforce the already marked person of subject, object, possessor or prepositional object. When attached to verbs, *notae augentes* exhibited a clearly hierarchical pattern, according to which they had to agree with whichever argument was highest on the hierarchy “1st person > 2nd person > 3rd person animate > 3rd person inanimate”. Griffith discusses the origins and motivations of such a system, relating it to the deictic origin of the markers. While the explanation proposed by the author seems to me to be rather inconclusive and not fully convincing, the unquestionable value of this paper is the clear presentation of non-trivial empirical data previously unknown to a broad typological audience. However, I can’t help pointing out that using the ungrammaticality sign (“**”) with respect to an unattested syntactic pattern in an ancient language (ex. 18 and 19 on p. 205) is a bit far-fetched, especially given the relatively moderate number of relevant examples (cf. the table on p. 208).

Two papers of Part III argue against the hierarchy-based explanation of person marking in two South American language families. Antoine Guillaume in “From ergative case-marking to hierarchical agreement. A reconstruction of the argument-marking system of Reyesano (Takanan, Bolivia)” (p. 217–256) argues on the basis of comparative evidence that the verbal agreement in transitive clauses of Reyesano apparently following the “2>1>3” hierarchy is a result of such processes as the loss of the original ergative case marking, morphologization of independent personal pronouns, and, importantly, the sociopragmatic face-saving strategies resulting in the omission of first person markers in the presence of a second person marker (the role of such effects is further discussed in the paper by DeLancey). Françoise Rose in “Are the Tupi-Guarani hierarchical indexing systems really motivated by the person hierarchy?” (p. 289–307) questions the validity of the explanation of the patterns of verbal marking in terms of a person hierarchy, showing that only the most general SAP→3 hierarchy can reasonably work for the whole of Tupi-Guarani family and that many of the observable patterns are not amenable to a hierarchy-based account at all. Rather, the grammaticalization of person prefixes from a system of independent pronouns comprising only SAP forms can better explain the facts.

Part III of the book is closed by “Incipient hierarchical alignment in four Central Salish languages from the Proto-Salish middle” (p. 309–342) by Zalmāi ʔəswəli Zahir. The author compares the use of passive- and antipassive-like constructions in Squamish, Halkomelem, Klallam and Lushootseed (of which he is a native speaker) against the distribution of the basic transitive construction in these languages across the four domains singled out in Zúñiga (2006): local (SAP→SAP), direct (SAP→3), inverse (3→SAP) and non-local (3→3). It is shown that the original passive construction cannot occur in the direct domain and has become the

pragmatically unmarked expression of the inverse domain, while the originally antipassive construction cannot occur in the inverse domain. The four languages surveyed show a cline in the degree of obligatoriness of the passive construction in the inverse domain: Lushootseed is the most conservative, with the passive just being a high frequency option, Klallam requires it to occur whenever a 3rd person acts on an SAP, and Halkomelem and Squamish lie in between, showing a ban on the non-passive expression of the 3→2 situations. As for the antipassive, while predictably banned from the inverse domain, it remains a clearly marked option in the direct domain. This results in a partly hierarchy-based alignment with the SAP always being expressed by pronominal markers on the verb and the 3rd person agent being often encoded as an oblique. This is a very clearly written and convincing paper, where qualitative observations of grammatical constraints are complemented by textual counts.

Part IV of the book includes three different studies discussing counterexamples to the referential hierarchy. Johannes Helmbrecht, Lukas Denk, Sarah Thanner and Ilenia Tonetti in “Morphosyntactic coding of proper names and its implications for the Animacy Hierarchy” (p. 377–401) argue against singling out proper names as a separate point on the referential hierarchy intermediate between pronouns and human common nouns. The authors base their analysis on a convenience sample of about thirty split-ergative languages, strongly biased towards Australia. They show that only a couple of languages can be argued to single out proper names as a category with a specific pattern of case marking, while even a greater number of languages treat them in a way contradicting the hierarchy. Likewise, the authors have found a single language, Tlahuitoltepec Mixe (southern Mexico), where proper names are opposed to both personal pronouns and human common nouns as triggers of verbal person marking. In contrast to most papers in the volume, this one does not adduce diachronic arguments to any serious extent. Though certainly interesting and relevant, this paper seems to me to be weaker than the other contributions to the volume. First, its database is not representative enough, hence some of the empirical claims need to be qualified (especially in the light of the fact that some of the sources the authors have used are clearly insufficient, e.g., the authors used a short paper by Nedjalkov for Chukchi, a language which boasts a number of detailed grammars, including Dunn 1999 in English). On p. 387 the authors state that “there is no language in our sample that has a marking split with regard to the ergative case between inanimate and animate common nouns in A function”, which is striking, since at least one such language is well known, i.e., Mangarayi from Australia, the region best represented in the sample. Second, in the same passage the authors claim that “there are no languages that have an ergative marking split between common nouns and [proper names]”; again, this statement is contradicted by the Circassian languages (Northwest

Caucasian, see e.g., Kumakhov et al. 1996), where proper names remain unmarked in all syntactic positions in contrast to both common nouns and third person pronouns. Second, the criteria for selecting relevant phenomena applied by the authors are perhaps too strict. Even if the proper names do not behave as a separate category for the purposes of alignment splits in more than a couple of languages, it is easier to find more supporting cases in the domain of allomorphy. As has been shown in Arkadiev (2017b), different allomorphs of the ergative case tend to be aligned with the categories on the referential hierarchy cross-linguistically, and proper names are one of the categories playing an important role in this in different languages. In the database of Arkadiev (2017b: 727) distinct allomorphs of the ergative occurring exclusively or almost exclusively with proper names are found in Bzhedug Adyge, Chukchi, Koryak, Alutor, Odoodee, Pitjantjatjara and Diyari. Third, the discussion of the empirical data in the chapter is sometimes just insufficient; thus, in the last paragraph of section 2 on p. 392 the authors allude to “certain peculiarities with regard to the morphosyntactic treatment of [proper names]” in a number of Algonquian languages, but do not clarify this point. On the next page, the authors say that “numerous instances show that PNs receive a special morphosyntactic coding that sets them apart from other referential expressions” in languages with hierarchical marking, but immediately note that they “could not demonstrate this point” “for the lack of space”. Given that their paper is by far not the longest in the volume, this motivation is surely questionable. Finally, in the last paragraph of the chapter on p. 394 the authors express “astonishment” at the fact that proper names frequently pattern with common nouns “and only rarely with personal pronouns”; indeed, if one considers the feature of inherent definiteness, “one would expect that [proper names] pattern with personal pronouns rather than with common nouns”. However, the mystery disappears if one takes into account that it is common nouns and certainly not personal pronouns that serve as one of the diachronic sources of proper names.

The two remaining chapters both deal with Tibeto-Burman languages. Scott DeLancey in “Deictic and sociopragmatic effects in Tibeto-Burman SAP indexation” (p. 345–375) discusses the typology and diachrony of transitive person marking across the Tibeto-Burman languages and, most importantly, shows that the peculiar marking in the local domain (where the 1→2 form is often unique and set off from the other members of the paradigm, while the 2→1 form tends to merge with the marking of 3→1) reflects sociopragmatic effects of the special nature of clauses describing the interactions between the speaker and the addressee (see Heath 1991). From a methodological perspective, DeLancey makes an important point that since SAP expressions only very rarely occur in narratives, any claims about their behaviour must be based on different text genres. Guillaume Jacques in “Generic person marking in Japhug and other Gyalrong languages” (p. 403–424) discusses the distribution and origin of generic person markers in a group of

closely related Tibeto-Burman languages. In this short paper it is shown that generic person marking of A or P originate either from nominalization markers or inverse markers and that these grammaticalization paths were also involved in the creation of the portmanteau 1→2 and 2→1 prefixes.

The book is generally well-edited, however, a number of serious typos and technical shortcomings have to be pointed out. On p. 116 in Mithun's chapter, a map is given with the caption "Dual number in California pronouns"; unfortunately, I was unable to find any reference to dual pronouns on this map, which seems to only represent the names and boundaries of languages. On p. 91 wrong glossing is observed in ex. (17b) and wrong translation in ex. (17e); on p. 140 the references to examples (12) and (13) seem to be mixed up; on p. 148 different parts of the coloured figure given on the previous page are referred to mentioning certain kinds of "dashes", which are lacking on the figure itself. Something appears to be lacking from table 6 on p. 269, and in the captions of tables 7–9 on pp. 270–271 "Plains Cree" is written without capitalization. Table 25 on p. 284 seems to not be referred to in the text. In table 2 on p. 331 the Halkomelem 1st Plural Low Control suffix must end in x^w , not xw . The representation of local person marking in Zbu in table 5 on p. 350 crucially differs from that in table 10 on p. 355. The same branch of Tibeto-Burman is called rGyalrong by DeLancey and Gyalrong by Jacques. Finally, in the author index it seems that all occurrences of the verb "say" in the book are listed under the name of Sergey Say.

To sum up, this volume is certainly an important contribution to the growing body of literature on diachronic typology and typological hierarchies, adding further evidence for the view that the latter should rather be applied with caution as explanatory tools in cross-linguistic studies and linguistic theory.

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