Dalila Ayoun, Agnès Celle, and Laure Lansari (Eds.), *Tense, Aspect, Modality, and Evidentiality: Crosslinguistic perspectives*. Amsterdam/Philadelphia: John Benjamins, 2018. Pp. 366. ISBN 978-90-272-0096-9 (Hb), 978-90-272-6390-2 (E-book)

The current volume, *Tense, Aspect, Modality, and Evidentiality: Crosslinguistic perspectives*, presents a collection of papers that were originally presented at the *Tense, Aspect, Modality, Evidentiality: Comparative, Cognitive, Theoretical and Applied Perspectives* conference held on 17–18 November 2016 at Université Paris Diderot. This volume gathers contributions on the connections between the categories of tense, aspect, modality, and evidentiality (TAM-E) in a variety of languages. Adopting different theoretical frameworks and a wide range of corpora, the contributors uncover the "semantic regularities and variation in the TAM-E system of the languages under study" (p. vii), which provides fruitful insights to our understanding of the cross-linguistic categories from a typological perspective.

This volume consists of fifteen chapters, the first of which is the 'Introduction' by the editors. The next fourteen chapters are divided into three parts. Part I consists of three chapters dealing with future time reference and ulteriority expressed by the future tense, modal verbs, and the conditional. Part II includes seven chapters looking into the relationship between evidentiality and epistemicity. Part III encompasses four articles focusing on aspect and past temporality. In what follows, we will give a brief introduction to each chapter, followed by an evaluation on the volume.

Part I: Futurity, modality, conditionals. In Chapter 2, Hütsch investigates the modal use of future tense in French and German in comparable corpora of news texts. Based on Rossari (2016), the author distinguishes the temporal use and modal use of future tense qualitatively by pointing out the semantic nuances they convey. The quantitative data show that, while the modal use of future tense is relatively rare compared to the temporal use in both languages, French has more modal use of future tense than German, with higher relative frequencies of modal occurrences and a greater range of modal nuances.

In Chapter 3, Treikelder and Amon compare the future-related temporal use of *devoir* 'must' in French and *pidama* 'must' in Estonian regarding their reference to the future in a parallel corpus. Following Kronning (2001), the authors extract *devoir* from the corpus and classify it into three types of future-tense uses. It is found that the *devioir-pidama* correspondence is

extremely low in the case of the "objective future in the past"<sup>1</sup> use of *devoir*, indicating that *pidama* does not have this temporal use. By contrast, results show a great resemblance between the two verbs in the other future-related uses of *devoir*, that is, the "subjective future in the past" and the "alethic future". The study reveals that *pidama* has a wider range of future-related uses than previously reported.

Next, Chapter 4 presents Bres, Diwersy, and Luxardo's study on the present conditional and the prospective imperfect in terms of their temporal use in discourse. After outlining their order of diachronic appearance, the authors address that the two forms compete with each other in the expression of subjective and objective ulteriority. Based on a diachronic corpus ranging from the sixteenth to the twentieth century, this study focuses on the evolution of the ratio of present conditional / prospective imperfect in the expression of subjective ulteriority within the scope of finite complement clauses introduced by the conjunction *que*. Variability-based neighbor clustering analysis (Gries & Hilpert, 2008) reveals that the proportion of prospective imperfect is steadily increasing. It further shows that the semantic category of the word that takes complement clauses impacts the competition between present conditional and prospective imperfect.

Part II: Evidentiality and epistemicity. In Chapter 5, Marín Arrese provides a contrastive study between English and Spanish on the semantic extensions of three TAM markers (i.e., epistemic modals, future perfect, and conditional perfect) expressing inferential and reportative evidentiality. Results show that, while inferential values are realized in all the three types of TAM markers in both languages, the reportative values are restricted to the conditional perfect *habría/n* 'would have' in Spanish. Parameters like immediacy in relation to the ground (immediate vs. non-immediate) and reality (real vs. projected) facilitate the expressing of inferential values primarily in epistemic modals but marginally in future perfect and conditional perfect forms. Other parameters including irrealis and frame-shifting trigger the reportative functions of conditional perfect forms.

Chapter 6 presents Carretero and Berdasco-Gancedo's study on the expressions of sources of information, knowledge, and belief in English and Spanish financial texts. After describing the expressions attested qualitatively, the authors carry out quantitative research in the corpus that consists of non-specialized journals (Level 1) and specialized journals (Level 2) in the two languages. Results show a higher frequency of the expressions in the English texts of Level 1, with the frequency for the other three groups showing no

The notion of subjective/objective future time reference in this chapter, and that of subjective/objective ulteriority in Chapter 4 are all from Nilsson-Ehle (1943).

significant differences. Future time devices such as the cases of *will* and *would* and their Spanish equivalents occur frequently within the scope of the expressions of source of information, knowledge, and belief, which is triggered by the non-factual status of future events. The corpus data also show a positive correlation between the total number of expressions of information, knowledge, and belief, and the total number of future time devices, especially in the Level 2 texts in the two languages.

In Chapter 7, Sentí distinguishes inferential evidentiality from epistemic modality based on the diachronic exploration of three Catalan modal verbs from the eleventh to the sixteenth century. During the grammaticalization processes, *haver de* 'have to' develops a value of specific inference, a subtype of inference that relies on directly observed external evidences, while *deure* 'must' acquires the value of generic inference that is based on the speaker's previous knowledge. On the other hand, *poder* 'can/may' gives rise to a value of conjecture, which expresses the speaker's commitment to the situation and denotes an epistemic value. Though the data at the same time reveal a diachronic tendency toward subjectification, with different degrees of subjectivity being construed by the three verbs (specific inference the lowest, generic inference higher, and conjecture the highest), Sentí argues that subjectivity on the one hand and inferential evidentiality and epistemic modality on the other should be clearly distinguished.

In Chapter 8, Ranger investigates the use of I think as a discourse marker in evidential or epistemic contexts. Following the enunciative approach,<sup>2</sup> the author hypothesizes that I think is not inherently ambiguous but that its widely acknowledged functions are no more than contextual configurations of its abstract SCHEMATIC FORM, that is, I think in all configurations "marks the localization of a target proposition relative to a subjective representation of the speaker" (p. 174). A number of significant constructions involving I think are brought out based on a collocational analysis in the BNC corpus, showing that the various values of I think result from the interaction of its schematic form, scope, and location (i.e., initial, final, or medial) and the lexico-grammatical properties of the target proposition. The author concludes that I think in itself expresses neither evidentiality nor epistemic modality, but that it is compatible with both because of its contextual configurations.

Chapter 9 is Tan and Mursell's analysis of two particles that share similar meanings, German *wohl* and Tagalog *yata*, both translatable as 'I infer'. While both are considered as inferential evidentials, their distribution in

<sup>[2]</sup> The enunciative perspective on language claims that "linguistic items do not possess a fixed inventory of meanings but mobilize abstract schematic forms which generate contextually situated shapes" (Culioli, 1990: 178).

embedded clauses sets them apart. Before testing in the corpus data, the authors assume a non-uniform treatment of the two evidentials based on their semantic contribution and context usage, claiming that *wohl* is a speech act operator (SAO evidential) that specifies an illocutionary force scoping over the utterance, whereas *yata* is a modal evidential that operates as part of the propositional content of the utterance. This claim is justified by the systematic comparison of the environments in which each particle can be embedded. Results show that *wohl* is only found in embedded clauses containing illocutionary force, whereas the distribution of *yata* is less restricted.

In Chapter 10, Celle examines two types of interrogatives used as indirect speech acts in English surprise contexts, namely, unresolvable questions (e.g., *What the hell is this?!*) and rhetorical questions (e.g., *What kind of sick mind would operate like that?*). Triggered by directly perceived evidence, surprise-induced unresolvable questions are speaker-oriented expressive speech acts, where the speaker expresses the emotional reaction to some unexpected discrepant situation. On the other hand, surprise-induced rhetorical questions are primarily generated by counterfactual evidence, aiming to persuade the addressee to update his/her commitment so that the speaker could cognitively integrate the unexpected information. While both types of interrogatives convey the mirative meaning, they exhibit "at different stages of the cognitive assimilation of unexpected new information" (p. 232).

Chapter 11 is Usonienė and Vincent's corpus-based study of the correlation between non-finiteness and evidentiality by examining the Lithuanian *Accusativus cum Participio* (AcP), a construction containing only matrix verbs of communication, cognition, and perception (CCP). Corpus data reveal that the AcP construction is found only in written Lithuanian, where matrix verbs of cognition and communication are the most frequent, but not in spoken discourse, and that the non-finite non-agreeing *be*-participle is obligatory in conveying evidential values since it is both a marker of a proposition and the indirectness of experience encoded in that proposition. The use of the non-agreeing participle is comparable to the non-finite constructions in other European languages like PASSIVE MATRIX VERBS WITH THE INFINITIVE in English. Together, it shows that non-finite forms correlate with evidentiality, with the specific evidential type depending on the semantics of the matrix verb.

Part III: Aspect and past temporality. Chapter 12 is Verhees' research on the grammatical semantics of the perfect in Avar and Andi, two East Caucasian languages. The term "perfect" refers to the aspectual category that expresses any of the universal "gram-types" (Bybee, Perkins, & Pagliuca, 1994, p. 48): RESULTATIVE, CURRENT RELEVANCE, and INDIRECT EVIDENTIALITY, among which the current relevance is considered as a

prototypical meaning of perfect forms. Resultative is treated as a distinct category from current relevance and is distinguished from the PERFECT OF RESULT, a subcategory of current relevance with regard to the presence of an ergative agent. The empirical data from elicitation and corpus show that the perfect in Avar can express two current relevance meanings (perfect of result and universal perfect), as well as resultative and indirect evidentiality. By contrast, the perfect in Andi shows no current relevance meanings; it can only convey indirect evidential meaning, which shows a more advanced stage of grammaticalization.

In Chapter 13, Corre looks into the bounded single situations expressed by the French tense–aspect marker *passé composés* (PC) and its translations into English, Russian, and Hungarian. Adopting Smith's (1991) two-component theory of aspect, whereby viewpoint aspect and situation aspect combine to yield different aspectual construals of situations, the author finds that the French PC displays near universal perfectiveness, whereas the English simple past is aspectually ambiguous, receiving both perfect and imperfect interpretations. Russian and Hungarian, on the other hand, rely heavily on lexico-morphological devices (i.e., PREFIX + BARE VERB) to display perfectivity. Despite the presence of telicizing prefixes in both languages, Hungarian differs from Russian in that the presence or absence of the prefix does not automatically correlate with the expression of bounded vs. unbounded situations.

Next, in Chapter 14, Wicher offers a corpus-driven constructional approach to two French past tenses, *passé composé* (PC) and *imparfait* (IMP) by analyzing the past-tense constructions of two polysemous verbs: *vouloir* 'want' and *voir* 'see'. Assuming that the two tenses are alternations, Wicher carries out a collostructional analysis for each verb in a genre-diverse reference corpus of French calculating the association strength between the PC- and IMP-constructions of the two verbs and their complements. Results show that *vouloir* predominantly co-occurs with verbal complements, with the perfective *vouloir* combining with dynamic transitive verbs to describe foregrounded events in discourse, and the imperfective *vouloir* mainly encoding politeness. On the other hand, *voir* occurs far more frequently with its perfective construction, but attracts far less collexemes with an imperfective value.

In the last chapter, Leal, Oliveira, and Silvano propose a framework accounting for the semantic behaviors of the inherently directed motion verbs *ir* 'go' and *vir* 'come' containing prepositional phrases (PP) headed by *para* 'to/toward' and *até* 'to' in European Portuguese. The authors assume that *ir* and *vir* have a lexical meaning that can be represented as a partially specified path scale (Kennedy & Levin, 2008) where the measuring dimension (i.e., a path) is specified, whereas the set of degrees (i.e., whether there is a maximum value in the scale) and the ordering relation (i.e., closeness to a

certain point) are not. PPs with *para* and *até* contribute distinctively to the specification of the parameters and give rise to different aspectual profiles of the predications with *ir* and *vir*: while *para* specifies the ordering relation, having the default atelic interpretation, *até* operates on the set-of-degrees parameter, having a telic interpretation.

Overall, the current volume has enriched the study of the TAM-E system by detailing the multi-functionality of the traditionally alleged grammatical categories of tense, aspect, modality, and evidentiality through a large variety of languages ranging from the Indo-European languages like English, German, French, Spanish, Old Catalan, Portuguese, Lithuanian, and Russian, to the lesser-studied ones such as Hungarian, Estonian, Avar, Andi, and Tagalog.

To start, the cross-linguistic observations and comparisons demonstrate vivid pictures of the inter-relations among different TAM-E categories, from which the general tendency of their semantic extensions is revealed. A considerable number of contributions choose one or more categories as point of departure and detail their multi-functionality in real data (e.g., the modal use of future tense in French and German in Chapter 2 and the evidential functions of TAM markers in English and Spanish in Chapter 5). It is suggested that tense, aspect, and modality generally extend towards the superordinate and more abstract domains, notably INFERENTIAL EVIDENTIALITY (Chapters 5, 9, 11, and 12) and/or EPISTEMIC MODALITY (Chapters 2 and 7). These semantic tendencies concluded from cross-linguistic observation have enlightened the correlation between tense, aspect, modality, and evidentiality, and laid theoretical foundation for future contrastive linguistic research.

Next, evidentiality is revisited with a remarkable status in this volume, in particular its subtype of inferential evidentiality. Evidentiality is considered by most of the contributors as a non-coherent category consisting of different subtypes, among which inferential evidentiality bears a closer link with epistemic modality. The conclusion is consistent with Nuyts' (2017) latest modification of his original (Nuyts, 2001) qualificational hierarchy on the TAM-E system, as he recently reanalyzes the classical evidentials of EXPERIENCED, INFERENTIAL, and HEARSAY, and argues that only inferential evidentiality is qualificational (see Lyu & Wang, 2018, for a discussion). As revealed in the languages tested in the volume and depicted in Nuyts' (2017) qualificational hierarchy, inferential evidentiality and epistemic modality demonstrate higher and wider conceptual scope than tense and aspect, as well as other subtypes of evidentiality and modality (e.g., hearsay/ reported, deontic modality, and dynamic modality).

In addition, the volume suggests promising ways of differentiating epistemic modality from evidentiality. While previous attempts in this aspect seem to

be dissatisfying (e.g., de Haan, 1999; Squartini, 2004; Cornillie, 2009; Hennemann, 2012), Sentí in Chapter 7 convincingly identifies the distinction with his careful examination of the evolution of Catalan modals. Holding the view that epistemic modality is not directly linked to inferencing, Sentí divides inferences into two types and sets them apart from conjectures. Inferences, on the one hand, indicate evidences from either directly observed resources (specific inference) or previous knowledge of the speaker (generic inference); conjectures, on the other hand, express the speaker's commitment (thus with an epistemic value) and are not related to any of those. Diachronically, the Catalan modals under scrutiny each develops a particular novel meaning: specific inference (haver de), generic inference (deure), epistemic possibility (poder), demonstrating that "there is not necessarily a connection between an evidential value and an epistemic one" (p. 160). Though it has long been the consensus that epistemic modality and evidentiality are tightly interwoven and hard to separate, this particular study shows the possibility of distinguishing one category from the other.

Methodologically, the present analyses of TAM-E categories are integrated deeply with corpus-based approaches. Apart from the descriptive analysis of the corpus data, a number of inferential statistics, including variability-based neighbor clustering (Chapter 4), n-grams analysis (Chapter 8), and collostructional analysis (Chapters 8 and 14), are applied to explore the lexical–syntactic environments of TAM-E markers. These frequency-based studies clearly show the functional distributions of TAM-E categories, including their usage patterns and collocational or phraseological features in actual discourse. Based on corpus data, the volume disentangles the theoretical issues to a considerable extent, setting a good example for further research in revealing the characteristics of TAM-E categories in different genres (e.g., Chapters 2, 6, and 10), registers (e.g., Chapter 12), and even levels of specialization of the text (e.g., Chapter 6).

In brief, the current volume brings together the latest cross-linguistic studies on the categories of tense, aspect, modality, and evidentiality. The rich language resources it involves and the cross-linguistic perspective it takes are appealing to contrastivists who endeavor to find similarities as well as differences among different languages, which also sketches a good picture for language typologists, who pursue the distributional tendencies of linguistic structure from the potential universals across languages (e.g., Bickel 2007, 2015). The semantic–functional approach taken by most of the contributions in this volume is enlightening for readers of *Language and Cognition*, especially those who are from functional and cognitive backgrounds – not only because of its novel theoretical accounts of TAM-E categories, but also the corpus-driven methods that provide inferential data, which makes

linguistic analysis firmly grounded on objective evidences. All in all, we believe this volume is a worthwhile choice for contrastivists, typologists, cognitive, and functional linguists, as well as corpus linguists.

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