

Organizer

- Ghanshyam Sharma (INALCO, PLIDAM, LABEX-EFL)

Scientific committee

- Anne Abeillé (University of Paris)
- Tanmoy Bhattacharya (University of Delhi, India)
- Rajesh Bhatt (University of Massachusetts, Amherst, USA)
- Miriam Butt (University of Konstanz, Germany)
- Patricia Cabredo Hofherr (CNRS, Paris)
- Patrick Caudal (CNRS, University of Paris)
- Jiyoung Choi (INALCO)
- Eystein Dahl (University Adam Mickiewicz of Poznań, Poland)
- Östen Dahl (University of Stockholm, Sweden)
- Ashwini Deo (University of Texas, USA)
- Peter Edwin Hook (Universities of Michigan and Virginia)
- Brenda Laca (University of Paris)
- Annie Montaut (INALCO, Paris)
- Adeline Patard (University of Caen, Normandie)
- Ghanshyam Sharma (INALCO, Paris)
- Thomas Szende (INALCO, Paris)

Contents

1	<i>Pertinacity in Light Verbs Revisited</i> — Miriam Butt	5
2	<i>The diachrony of tense, aspect, and modality: Evidence from Vedic Sanskrit</i> — Eystein Dahl.....	7
3	<i>Tense Auxiliaries and the rise of aspectual contrasts in New Indo-Aryan</i> — Ashwini Deo....	8
4	<i>On the typology of TAM systems in the Munda languages</i> — Gregory Anderson.....	9
5	<i>The Iwaidja imperfective as a ‘weak imperfective’</i> — Patrick Caudal & Rob Mailhammer .	10
6	<i>Vedic-Prose ta-participles with genitive “agents” revisited</i> — Hans Henrich Hock	12
7	<i>The typology of apprehensives in South Asian languages and their geolinguistics</i> — Peter Edwin Hook	13
8	<i>On the two verbally unmarked forms -(y)aa and -taa in Hindi</i> — Annie Montaut.....	16
9	<i>Light Verb Stubbornness (put and show in Sinhala)</i> — Benjamin Slade.....	16
10	<i>Formal and Functional Criteria: Some cases of a Symbiotic Relationship</i> — Karumuri V. Subbarao	18
11	<i>Perfective and Imperfective systems in Kherwarian languages</i> — Gregory Anderson & Bikram Jora.....	20
12	<i>Exploring Tense, Aspect, and Modality in Telugu: A Comprehensive Linguistic Analysis</i> — Zelalem Girma Abate & Atreyee Sharma.....	21
13	<i>Suppletive Copula of Khatri: A Case of Language Contact</i> — Antonia Alvares.....	22
14	<i>Modal Verbs and Complementation across South Asia: a comparative semantics</i> — Diti Bhadra	23
15	<i>Challenges in Operationalizing Mood and Modality in Data Annotation Task</i> — Ojaswee Bhalla	25
16	<i>Modal meaning in Kannada: beku and -ee as keys to understanding necessity</i> —Prarthanaa Bharadwaj	25

17	<i>The Distribution of Non-finite Complements of Deontic Modal Heads in Marathi —</i> Shubham Suresh Bokade & Nirnimesh Bhattacharjee	27
18	<i>Tense and Aspect Concepts of Manipuri in the Speech of an Autistic Child in Manipur —</i> Ahanthem Romita Devi	28
19	<i>Habituality and the placement of Conditional Antecedents in Bangla —</i> Ishani Guha	29
20	<i>The expression of strong necessity in Suansu —</i> Jessica K. Ivani & Dr. Taras Zakharko	30
21	<i>Can I make myself do it? —</i> Kanupriya Kale	31
22	<i>Cross-linguistic variation of Implicative inferences —</i> Fahima A. Khan & Rajesh Kumar ..	32
23	<i>Theory of Vaiyākaraṇās of the TAM properties for the Sanskrit verbal forms —</i> Tapas Khanra & Malhar Kulkarni.....	33
24	<i>Tense, Aspect and Ergativity in Pahari —</i> Zafeer Hussain Kiani	34
25	<i>Aspectual Semantics and Aspectual Classes in the Hindi-Urdu Compound Verb and Slavic</i> <i>Aspect —</i> Rainer Kimmig.....	34
26	<i>Formation of perfective verb stems in Kullui: diachrony and synchrony —</i> Anastasia Krylova & Evgeniya Renkovskaya.....	36
27	<i>Against aspectogenesis: revisiting the diachrony of light verbs —</i> Aaditya Kulkarni.....	36
28	<i>Interaction of aspect and negation with respect to compound verb construction and serial</i> <i>verb construction in Marathi —</i> Chandan Kumar & Prajwal Shelar	37
29	<i>Tense, Mood and Aspect in Bishnuriya Manipuri —</i> Nazrin B. Laskar	38
30	<i>The Pragmatic Conditions Determining Telicity —</i> Sanjaya Kumar Lenka & Kalyanamalini Sahoo.....	39
31	<i>Tense and silent copulas in Vedic infinitives: A view from the Atharvaveda and the Rgveda</i> <i>—</i> Davide Mocci.....	40
32	<i>Habitual and Progressive Aspects in Hindko: A Comparative Study with Urdu —</i> Muhammad Nawaz	41
33	<i>Language Change in Bhojpuri Progressive Expressions: A Comparative Study with Hindi-</i> <i>Urdu and Awadhi —</i> Miki Nishioka.....	43

34	<i>On the Distributive Partial Realization of Mandarin Accomplishments</i> — Xiaolin Niu	45
35	<i>Parya verb forms expressing unreality</i> — Tatiana Oranskaia.....	46
36	<i>Patterns of tense markers in the link languages of South-Western Bengal, India</i> —Dripta Piplai (Mondal)	47
37	<i>Tense, Aspect, and Modality (TAM) system in Pashto</i> — Gohar Rahman	48
38	<i>The Middling ‘i’ in the verbal forms of Sanskrit loan words borrowed into Tamil</i> — S. Ramaratnam	50
39	<i>Aspect Restrictions with Ergative and Dative Subjects in Marathi Relative Clauses</i> — Anupama Reddy & Shinichiro Fukuda.....	51
40	<i>The General and Progressive Present in Hindi: Towards a Multilayered Theory of Aspect</i> — Elmar Josef Renner	53
41	<i>Intensive verbal forms in the Atharvavedic recensions: between non-morphologically articulated and grammaticalized verbal acts</i> — Paola M. Rossi	54
42	<i>Transitive vs. intransitive agreement in Azamgarhi perfective constructions</i> — Maaz Shaikh	55
43	<i>Verb Raising in Tamil: The argument from complex predicates in VP ellipsis constructions</i> — Rajamathangi Shanmugasundaram.....	58
44	<i>Is egophoricity part of the TAM system? Evidence from Kathmandu Newā(r)</i> — Shahani Singh Shrestha & Martina Wiltschko	59
45	<i>In between time and modality: Challenges from Vedic Sanskrit</i> — Althea Rosa Ludovica Sovani	61
46	<i>Deontic Modality Through the Verb ‘to give’: Evidence from Thai</i> — Upsorn Tawilapakul	62
47	<i>Semantics of Aspect in Mandarin Chinese</i> — Sebastian Wielosz.....	63

Plenary Talks

1 *Pertinacity in Light Verbs Revisited* — Miriam Butt University of Konstanz, Germany (joint work with Aditi Lahiri)

Originally interested in tracing the origin of the ubiquitous New Indo-Aryan aspectual V-V complex predicates as in (1), Butt and Lahiri (2013) found that there was no stage of Indo-Aryan in which a V-V complex predicate could not be detected. They therefore concluded that as a possible syntactic configuration, V-V complex predicates have been historically pertinacious across the ages. They also noted that light verbs are always form-identical with a main verb, showing no change in overt form (phonology/morphology) that is independent of historical changes undergone by the main verb. They therefore proposed that the light verb and main verb versions be derived from the same underlying entry, as sketched in (2) and that any reanalysis into auxiliaries and from there potentially to tense/aspect morphology takes place with respect to the main verb version.

- (1) a. *nadya=ne xat lik^h di-ya*
Nadya.F=Erg letter.M write give.Perf.M.Sg
'Nadya wrote a letter (completely). (Urdu/Hindi)
- b. *ram bag^h-ta-ke mer-e p^hel-lo*
Ram.nom tiger-CI-Acc hit-Gd throw-Past-3
'Ram killed the tiger.' (Bengali)

This was and is a rather startling claim that runs counter to much of thinking in the grammaticalization literature (e.g., Hopper and Traugott (1993), Bybee et al. (1994), Hook (1991, 2001)). However, there is a set of supporting evidence. For example, the modern Indo-Aryan morphological causative is not much different from how it was over 2000 years ago (Butt 2003, Jamison 1976, Speijer 1886) and Davison (2014) notes that the complex predicate permissive with 'give' also already appears to have existed in Old Indo-Aryan. Beyond Indo-Aryan, there is crosslinguistic evidence that light verbs indeed tend to be historically stable (cf. Bowerman 2008, Brinton and Akimoto 1999, Klumpp 2013).

More recently, Slade (2013) and Ittze's (2022) have taken issue with Butt & Lahiri's claim as to the historical pertinacity of light verbs. In this talk, we go through the claims and data of each of these papers in some detail and show that Butt & Lahiri's claim as to the pertinacity of light verbs not only holds up, but is confirmed by the data adduced in both Slade (2013) and Ittze's (2022).

Slade (2013) concentrates on examining evidence for grammaticalization from verbs that he assumes to be light verbs. However, a close look at the data shows that Slade does not carefully distinguish between light verbs, modals and auxiliaries (cf. Butt 2010) and that all of the examples adduced seem to either involve an auxiliary developing from a main verb (e.g., progressive *rAh* from 'stay/remain', cf. Bybee et al. 1994 for instances of this well-established type of change) or modals (e.g., *sAk* 'can/be able to'). We show that once this analytical confusion is sorted through, the data does not run counter to Butt & Lahiri's claim.

Ittze's (2022) looks at Sanskrit (and Vedic) N-V formations in the context of the grammaticalization of the perfect in Indo-Aryan. However, the modern Indo-Aryan perfect/perfective arose from the adjectival past participle in *-ta* and the picture of the distribution and properties painted by Ittze's (2022) of the Old Indo-Aryan N-V combinations is very much like the structure and properties described and analyzed by Mohanan (1994) for modern Hindi N-V complex predicates. Furthermore, there are three major light verbs involved: 'do', 'be', 'become', which each show constraints on permissible combinations and frequency effects. This is exactly what is found for Urdu/Hindi in a corpus study conducted by Ahmed and Butt (2011). Thus, rather than adducing evidence against Butt & Lahiri's claim as to the pertinacity of light verbs, Ittze's (2022) provides more evidence for Butt & Lahiri's claim from the domain of N-V combinations.

In conclusion, we show that even in the face of the critical discussions in Slade (2013) and Ittze's (2022), overall Butt&Lahiri's central claim continues to hold up — there are no instances of auxiliaries that have developed from light verbs.

References

- Ahmed, Tafseer and Butt, Miriam. 2011. Discovering Semantic Classes for Urdu N-V Complex Predicates. In *Proceedings of the Ninth International Conference on Computational Semantics, IWCS '11*, pages 305–309, Oxford, United Kingdom.
- Bowern, Claire. 2008. The Diachrony of Complex Predicates. *Diachronica* 25(2), 161–185.
- Brinton, Laurel J. and Akimoto, Minoji (eds.). 1999. *Collocational and Idiomatic Aspects of Composite Predicates in the History of English*. Amsterdam: John Benjamins.
- Butt, Miriam. 2003. The Morpheme That Wouldn't Go Away, unpublished Ms., University of Konstanz.
- Butt, Miriam. 2010. The Light Verb Jungle: Still Hacking Away. In M. Harvey M. Amberber and B. Baker (eds.), *Complex Predicates in Cross-Linguistic Perspective*, pages 48–78, Cambridge: Cambridge University Press.
- Butt, Miriam and Lahiri, Aditi. 2013. Diachronic Pertinacity of Light Verbs. *Lingua* 135, 7–29.
- Bybee, Joan, Perkins, Revere and Pagliuca, William. 1994. *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. Chicago: The University of Chicago Press.
- Davison, Alice. 2014. Non-finite complements and modality in dee-naa 'allow' in Hindi-Urdu. *Natural Language and Linguistic Theory* 32, 137–164.
- Deo, Ashwini. 2002. A Diachronic Perspective on Complex Predicates in Indo-Aryan, talk given as part of the Workshop *Complex Predicates, Particles and Subevents*, Konstanz, September.
- Hook, Peter and Pardeshi, Prashant. 2009. *Inflation in the Indo-Aryan compound verb: 1300-2000*, volume 1 of *Cognitive Linguistics: Cognition, Language, Gesture*. Berlin, Boston: De Gruyter Mouton, 2010.
- Hook, Peter Edwin. 1991. The Emergence of Perfective Aspect in Indo-Aryan Languages. In Elizabeth Traugott and B. Heine (eds.), *Approaches to Grammaticalization*, pages 59–89, Amsterdam: Benjamins.
- Hook, Peter Edwin. 1993. Aspectogenesis and the Compound Verb in Indo-Aryan. In Manindra Verma (ed.), *Complex Predicates in South Asian Languages*, pages 97–113, Delhi: Manohar Publishers & Distributors.
- Hook, Peter Edwin. 2001. Where to Compound Verbs come from? (and where are they going?). In Peri Bhaskararao and K.V. Subbarao (eds.), *The Yearbook of South Asian Languages and Linguistics*, pages 102–130, New Delhi: Sage Publications.
- Hopper, Paul J. and Traugott, Elizabeth C. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Iglesias-Ra'bade, L. 2001. Composite predicates in Middle English with the verbs *nimen* and *taken*. *Studia Neophilologica* 73, 143–163.
- Ittze's, Ma'te'. 2022. Light verb, auxiliary, grammaticalization: The case of the Vedic periphrastic perfect. *Die Sprache* 54, 95–129.
- Jamison, Stephanie. 1976. Functional Ambiguity and Syntactic Change: The Sanskrit Accusative. In *Papers from the Parasession on Diachronic Syntax, 12th Regional Meeting of the Chicago Linguistic Society*, pages 126–135.
- Klumpp, Gerson. 2013. On complex predicates in Kamas, talk presented at the *Approaches to Complex Predicates Workshop*, Paris.
- Mohanan, Tara. 1994. *Argument Structure in Hindi*. Stanford, California: CSLI Publications.
- Slade, Benjamin. 2013. The diachrony of light and auxiliary verbs in Indo-Aryan. *Diachronica* 30, 531–578.
- Speijer, J. S. 1886. *Sanskrit Syntax*. Delhi: Motilal Banarsidass, republished 1973.



2 *The diachrony of tense, aspect, and modality: Evidence from Vedic Sanskrit* — Eystein Dahl Adam Mickiewicz University, Poznań, Poland

This contribution explores the factors conditioning the development of the Old Indo-Aryan tense/aspect/modality system, with particular reference to Vedic Sanskrit. Throughout this first phase of its historical attestation, Old Indo-Aryan underwent a series of morphosyntactic changes of which the Vedic text corpus, both the Vedas proper and the later Brāhmaṇas and Āraṇyakas, provide a rich array of diachronic data which have hitherto only been partially explored. In the verbal system, the following morphosyntactic changes impacted the inventory of tense, aspect, and mood categories:

- Semantic bleaching of the inherited aspect stems
- Loss of the non-indicative moods of the perfect and aorist as well as general loss of the subjunctive and injunctive in (positive) assertive clauses
- Rise of a tense system with temporal remoteness and evidentiality distinctions in the past and future
- Emergence of a variety of periphrastic constructions with semantically specific aspectual meanings, e.g., resultative and progressive
- Analogous developments are found in many other languages, but the Vedic text corpus stands out in that it allows for exploring these changes in some detail.

Previous studies have dealt with these developments but have mostly had a restricted focus (e.g., Tichy 1992, 2006; Dahl 2013, 2014, 2015, 2016; Lowe 2017; Grieco 2022, 2023, 2024). The present contribution explores them from a systemic perspective, aiming to establish to what extent some of them can be plausibly shown to be interrelated. Recent work on grammaticalization emphasises its close relationship with typology (e.g., Narrog 2017, Narrog and Heine 2021, the papers in Narrog and Heine (eds.) 2018). Moreover, Bhat (1999) makes a case for the claim that languages differ with regard to the relative prominence they ascribe to tense, aspect, and modality. One likely corollary of this is that grammaticalization processes are constrained by the prominent category type in a given language. These considerations suggest that an important function of grammaticalization is to ensure systemic continuity and that the loss or erosion of certain semantic or morphosyntactic features facilitates or triggers the rise of newly emerging categories with analogous properties. It remains an open question whether an assumption along such lines can explain the various developments outlined above and this contribution aims to clarify this and related problems.

References

- Bhat, D. N. S. 1999. *The prominence of tense, aspect and mood*. Amsterdam: Benjamins.
- Dahl, Eystein. 2013. 'Typological change in Vedic: The development of the Aorist from a Perfective Past to an Immediate Past' in Folke Josephson and Ingemar Söhrman (Eds.): *Diachronic and Typological Perspectives on Verbs*. Amsterdam: Benjamins, pp. 261-298.
- Dahl, Eystein. 2014. 'The Development of the Vedic Perfect: From Anterior to Inferential Past'. In Jared Klein and Elizabeth Tucker (Eds.): *Vedic and Sanskrit Historical Linguistics: Papers from the 13th World Sanskrit Conference*. New Dehli: Motilal Banarshidas, 179-242.
- Dahl, Eystein. 2015. Toward a Formal Model of Semantic Change: A Neo-Reichenbachian Approach to the Development of the Vedic Past Tense System. *Lingua Posnaniensis* 57:1, 41-76.
- Dahl, Eystein. 2016. 'The origin and development of the Old Indo-Aryan predicated –*tá* construction.' In Eystein Dahl and Krzysztof Stroński (Eds.) *Indo-Aryan Ergativity in Typological and Diachronic Perspective*. Amsterdam: John Benjamins, (2016) 63-110.
- Grieco, Beatrice. 2022. *Forme e funzioni delle perifrasi continue in indiano antico*. Università per Stranieri di Siena Dissertation.

- Grieco, Beatrice. 2023. Periphrases with motion verbs in Vedic Sanskrit: (Between) textual analysis and grammaticalization patterns. *Transactions of the Philological Society* 121:2, 226-250.
- Grieco, Beatrice. 2024. The Sanskrit Auxiliary sthā- ‘stand’, with a note on Avestan stā-. *Indo-Iranian Journal* 62:2, 103-124.
- Lowe, John. 2017. The Sanskrit (Pseudo)Periphrastic Future. *Transactions of the Philological Society* 115:2, 263-294.
- Narrog, Heiko. 2017. Typology and Grammaticalization. In Alexandra Y. Aikhenvald and R. M. W. Dixon (eds.) *The Cambridge Handbook of Typology*. Cambridge, CUP, 151-177.
- Narrog, Heiko and Bernd Heine (eds.). 2018. *Grammaticalization from a Typological Perspective*. Oxford: OUP.
- Narrog, Heiko and Bernd Heine. 2021. *Grammaticalization*. Oxford: OUP.
- Tichy, Eva. 1992. Wozu braucht das Altindische ein periphrastisches Futur? *Zeitschrift der der Deutschen Morgenländischen Gesellschaft* 142:2, 334-342.
- Tichy, Eva. 2006. *Der Konjunktiv und seine Nachbarkategorien. Studien zum indogermanischen Verbum, ausgehend von der älteren vedischen Prosa*. Bremen: Hempen.



3 *Tense Auxiliaries and the rise of aspectual contrasts in New Indo-Aryan* — Ashwini Deo University of Texas at Austin, USA

Late Middle Indo-Aryan lacks a present–past tense distinction and temporal reference is recovered contextually or supplied by means of optional adverbial devices. The innovation of auxiliaries that conventionally encode tense relations is attested in several New Indo-Aryan languages. These present and past tense auxiliaries form periphrastic constructions with imperfective and perfective markers inherited from the Middle Indo-Aryan system. A peculiar aspect of these innovated periphrases is that although they are built from imperfective and perfective markers respectively, they are predominantly used to signal the semantically more specific progressive and perfect aspects at the earliest stages in their recruitment. Later in the development, these periphrastic expressions become further conventionalized for expressing the broader imperfective and perfect aspect with the expected temporal specification. I investigate this phenomenon in Old/Middle Gujarati and Marathi languages. As an example, consider the data from Bhayani (1998), who observes for Old Gujarati that the earliest stage is without periphrastic tense-based imperfective constructions (1a), which are only introduced around the mid-14th century (1b)–(1c) and used dedicatedly to convey the progressive aspect.

- (1) a. tumhārau bālamitt-u Madanadatt-u cirāgat-u
your childhood.friend-NOM.SG M- NOM.SG long.arrived-NOM.SG
dvārades-i **vartt-ai**
door-LOC.SG stand-IMPV.3SG
Your childhood friend, Madanadattu, arrived after a long time, *is standing* at the door. (SB: 144:16)
- b. ām tāta e sarva loka alika **bol-ai** **chai**
yes father these all people.NOM.PL lie NOM.SG speak-IMPV.3PL PRS.3.PL
Yes father! All these people are lying (lit. speaking a lie) (SiB Story 1; pp.2)
- c. jo-u, jo-u, koi vidyādhara athavā
look-imp look-imp some vidyādhara.NOM.SG or
manuśya rukmiṇī=nai le-i **jā-i** **ch-ai**
man.NOM.SG R=ACC take-GER go-IMPV3.SG PRS.3.SG
Look, look! Some Vidya[̄]dhara or man is taking Rukmiṇī away. (SiB, Story 4, pp.12)

The question I address is the following: why should the innovation and spread of morphosyntactic tense marking have an effect on the aspectual contrasts that are expressible in a given linguistic system? More specifically, why should the combination of tense auxiliaries with imperfective and perfective aspect give rise to progressive and perfect aspect meanings respectively? I offer a functionally motivated solution to this puzzle showing how the grammaticalization of scalar inferences leads to an articulated aspectual system.



Invited Talks

4 *On the typology of TAM systems in the Munda languages* — Gregory Anderson Living Tongues Institute for Endangered Languages

Munda languages have much to offer to our understanding of TAM systems. In this paper we cover several topics of wider interest that various Munda languages exhibit. We focus on three main topics: i) the variable treatment of TAM when under negative scope ii) including differences in the semantics of TAM markers between complex and simplex predicates; iii) the complex interaction between voice and valence and TAM selection and the related phenomena that TAM marking can shift the lexical meaning of specific stems, in other words an otherwise inflectional element can perform derivational/lexical functions. For example, with respect to the first two points, in various Munda languages specific TAM markers are incompatible with negative scope operators (1) or change their meaning when under negative scope (2). Certain Munda languages also show differences in the meaning of individual TAM markers in simplex and complex predicates under negation (3) or flip the indexing of TAM between lexical and auxiliary verbs. In addition, re: topic iii), several Munda languages have voice-or valence specific TAM specification such that active or transitive verbs require one set while middle or intransitive ones require a different set (4). Related to this is the complex system of TAM marking seen in different Kherwarian languages such as Mundari, Ho or Santali. On the one hand, taking a functional perspective, the same function may be encoded by unrelated TAM forms depending on whether the verb stem is specified as, or to be interpreted as, active/transitive or inactive/middle (5) and on the other hand, selection of a particular TAM marking may change the lexical meaning of the stem (6). All data come from authors' field notes unless indicated.

References

- Anderson, G. D. S. and K. D. Harrison. Remo. In G. Anderson (ed) *The Munda Languages*. London: Routledge (Taylor & Francis). 557-632.
Neukom, Lukas. 2000. *Santali*. München: LINCOM.

- (1) i. Sora NPST
 nen gaga-na-n jaŋ-t-ai oŋe əŋ-jaŋ-ai
 I ~eat-ITR/MDL-N.SFX get-NPST-1ACT or NEG-get-1ACT
 “‘will I get something to eat or will I not?’”
 ii. Plains Gta? FUT
 n-tʃoŋ=e n-a-tʃoŋ
 1-eat-FUT 1-NEG-eat
 ‘I will eat’ ‘I won’t eat’
 ii. Hill Gta? FUT
 kine hāwe a-na m-bi?=*we* kine hāwe a-na n-a-bi?
 this bow OBJ-you 1-give-FUT this bow OBJ-you 1-NEG-give
 ‘I will give you this bow’ ‘I will not give you this bow’

- (2) i. Gutob
ser-gu ar-ser-gu ser-to ar-ser-to
 sing-PST.ITR/MDL NEG-sing-PHB sing-NPST.ITR/MDL NEG-sing-NEG.PST.ITR/MDL
 ‘sang’ ‘don’t sing!’ ‘sings’ ‘didn’t sing’
- ii. Hill Gta?
na-basoŋ=ge na-á=basoŋ=ge sela santa we=tə gubug a-goi? =tə
 2-tell-PST 2-NEG-tell-PHB girl market go=PRS pig NEG-die-NEG.PST
 ‘you have told (me)’ ‘don’t tell (me)!’ ‘the girl goes to the market’ ‘the pig didn’t die’
- (3) i. Hill Gta?
ho(?)=barsoŋ diŋ=tə ho(?)=barsoŋ a-riŋ=tə
 RCP=speak IPFV=RLS/PRS RCP=speak NEG-IPFV=RLS/PRS
 ‘are speaking to each other’ ‘are not speaking to each other’
- ii. Gutob
niŋ=nu dzoŋek dieŋ du-gu niŋ=nu dzoŋek dieŋ] æd-du-gu
 1SG-GEN two house AUX-PST 1SG-GEN two house NEG-AUX-PST
 ‘I had two houses’ ‘I did not have two houses’
- iii. Juray
gidʒ-le rabti-t-am rabti a-gidʒ-am
 see-CV CAP-NPST-2SG.UND CAP NEG-see-2SG.UND
 ‘(I) can see you’ ‘(I) can’t see you’
- (4) Remo (Anderson and Harrison 2008)
 ITR/MDL TR/ACT ITR/MDL TR/ACT
 PST -gI oʔ IPFV/NPST -ta -to
- (5) Ho
seno(?)-ja-n=a=m maŋdi dzom-ke-d-a=m
 go-PRF.ITR-ITR/MDL-IND=2SG.SUBJ rice eat-PRF.TR-TR/ACT-IND=2SG.SUBJ
 ‘you went’ ‘you ate the rice’
- (6) Santali
mɛrɔm-e ɡɔf-ket-ko-a Turta-i ɡɔf-en-a
 goat-3SG kill-PST:ACT-3PL-IND Turta-3SG die-PST-MID-IND
 ‘she killed some goats.’ (Neukom, 2001:104) ‘Turta died.’ (Neukom, 2001:104)
- ⦿⦿⦿

5 *The Iwaidja imperfective as a ‘weak imperfective’* — Patrick Caudal & Rob Mailhammer CNRS and University of Paris & Western Sydney University

The present talk will focus on the past imperfective (IPFV) tense in Iwaidja, a non-Pama-Nyungan Australian traditionally spoken in Northwestern Arnhem Land. The Iwaidja IPFV contrasts with an anterior tense (ANT), an aspectually underspecified tense semantically akin to the English simple past (Mailhammer & Caudal 2019; Caudal & Mailhammer 2022). We demonstrate that the IPFV cannot be regarded as a ‘general imperfective’ (Bybee, Perkins & Pagliuca 1994), and that it differs from well-studied types of

imperfectives, in particular Romance, Indo-Iranian and Slavic imperfectives, constituting a typologically distinct imperfective (Deo 2009; Altshuler 2014).

The data for this paper come from elicitation, experimental and narrative data collected in the community of Minjilang, Croker Island, since 2013. At first sight, said data suggest that the IPFV behaves like a general imperfective: it can refer to ongoing single events, habitual events, and of course pluractional/iterative events. But our data also suggest that the IPFV stands out as an imperfective, because it very frequently co-occurs (and semantically overlaps) with (a) morphological reduplication patterns (RED) (conveying a pluractional/iterative meaning), as well as (b) a special type of intonational marker, used to convey a markedly durative and/or a protracted iterative reading, here noted ::. Following (Mailhammer & Caudal 2019; Caudal & Mailhammer 2022), we will refer to the latter as *linear lengthening intonation* (or LLI). When prompted to comment on the use of ANT vs. IPFV forms, speakers often contrasted a single event reading with ANT (1a) vs. pluractional reading with IPFV (1b) – the latter being often, though not always, reinforced by combining with RED marking (1b) and/or LLI, thereby affecting the quantificational interpretation of internal argument NPs, cf. (1b) (‘too many’). ANT was found to contrast with IPFV in that it does not have any inherent pluractional reading, although it can take on one in combination with RED and/or LLI, cf. (1c). In addition to this, the IPFV can be used in sequence-of-event contexts, especially in utterances strikingly *emphatic* for duration and/or iteration, as they combine IPFV, LLI, RED marking and/or adverbials conveying duration/iteration. Crucially, (2)-(4) denote *bounded events*, as (Caudal & Mailhammer 2022) established that LLI conveys event boundedness, through a complex intonation pattern involving two subsequent intonational units – a lengthened syllable with a rising intonation in the first unit (2a) contributes a marked durative/iterated event, and is followed by a falling intonation on the next intonation unit (2b), conveying that the previous event (i.e. (2a)) is bounded (see also the ‘event bounding’ effect of *bartuwa* (‘finished’) in (3)). (4) offers another clear bounded iterative reading. Last but not least, our data demonstrate that the Iwaidja IPFV can also express *single durative bounded events*, cf. (5). Overall, the Iwaidja IPFV behaves neither like e.g., Romance nor like Slavic imperfectives. Thus, so-called ‘narrative’ uses of the French *imparfait* or Italian *imperfetto* (i) can only refer to single bounded events, in contrast to e.g. (2)-(5), and (ii) require specific discourse structural parameters (Caudal 2024) not found with the Iwaidja IPFV. As for Slavic imperfectives, while some involve a strong pluractional flavor not unlike that of the Iwaidja IPFV, their so-called ‘factual’ uses (Dickey 1995; Altshuler 2014) are known to involve strong presuppositional contexts (Klimek-Jankowska 2020) at odds with our Iwaidja data.

Most importantly, the Iwaidja IPFV has perfective-like readings in durative and/or iterative contexts. We will therefore argue that it constitutes an instance of *weak imperfective tense* – a concept inspired by the notion of ‘weak perfective’ tenses (Martin & Demirdache 2020), referring to perfective tenses contextually capable of receiving imperfective readings. Indeed, the Iwaidja IPFV is an imperfective tense capable of receiving perfective readings in iterative/durative contexts. We will conclude our investigations by observing that many similar ‘weak imperfective’ tenses can be identified across Australian languages, as they can convey bounded durative/iterative bounded readings, on top of run-of-the-mill, ‘general imperfective’ readings (i.e., continuous, unbounded single event or iterated event/habitual readings).

- (1) [context: informant is asked about ANT vs. IPFV forms of ‘cut’ in the context of tree cutting]
- a. *rildalkuny* that means one (Iwaidja)
 3msg>3sg.ANT-cut-ANT
 ‘he cut a tree’
- b. *rildalkukungung* that mean [sic]...too many
 3msg>3sg.IPFV-RED.cut-IPFV
 ‘he cut/was cutting lots of trees’
- c. *rildalkuny::* *barda* *kartbuniny*
 3msg>3sg.ANT-cut-ANT then 3sg.ANT-fall-ANT
 ‘he kept on cutting the tree [= chipping at the tree with an axe], then it fell down.’

- (2) [Context: bounded, past iteration of an event, followed by another past event] (Iwaidja)
 a. JC: *nanguj* [...] *kardbirrukung::*
 yesterday 3sg.IPFV-throw.RED-IPFV::
 b. *ya-wurryildi-ny* *manyij*
 3DIST.ANT-go.down-ANT sun
 ‘Yesterday he kept on throwing [the stone] until the sun went down’
- (3) *rildalkungung* *artbung:: bartuwa* (Iwaidja)
 3msg>3sg.IPFV-cut-IPFV again:: finished
 ‘He kept on cutting it again and again... then he finished’.
- (4) *ijburtikiny* *Wangaran.* *Wangaran kakang* (Iwaidja)
 3pl.DIST.ANT-go.ashore-ANT Malay_Bay. Malay_Bay 3fsg>3sg.ANT-throw-ANT
iyarl barakbarda murrkud kalmu kunak
 sand.hill there a.lot many country.
 ‘They crossed to Malay Bay. At Malay Bay she made lots of sandhills everywhere’.
 (OH_240701_CM_Warramurrungunyjji: 00:02:56.272 - 00:03:05.209)
- (5) *ari-ngan* *ari-ngan* *ari-ngan,* *arlarrarr.* (Iwaidja)
 3msg.IPFV-stand-IPFV 3sg.IPFV-stand-IPFV 3sg.IPFV-stand-IPFV in.vain/nothing.
 ‘He stood [waiting] there for ages, but to no avail.’

References

- Altshuler, Daniel. 2014. A typology of partitive aspectual operators. *Natural Language & Linguistic Theory* 32(3). 735–775. <https://doi.org/10.1007/s11049-014-9232-1>.
- Bybee, Joan, Revere Perkins & William Pagliuca. 1994. *The evolution of grammar: tense, aspect and modality in the language of the world*. Chicago: University of Chicago Press.
- Caudal, Patrick. 2024. On tenses as speech-act-level functions: Towards a novel analysis of the French ‘narrative’ imparfait. *Isogloss*.
- Caudal, Patrick & Robert Mailhammer. 2022. Linear Lengthening in Iwaidja: An Event-Quantifying Intonation at the Phonology to Semantics/Pragmatics Interface. *Languages* 7(3). 209–231. <https://doi.org/10.3390/languages7030209>.
- Deo, Ashwini. 2009. Unifying the imperfective and the progressive: partitions as quantificational domains. *Linguistics and Philosophy*. Springer 32(5). 475–521.
- Dickey, Stephen M. 1995. A Comparative Analysis of the Slavic Imperfective General-Factual. *Journal of Slavic Linguistics* 3(2). 288–307.
- Klimek-Jankowska, Dorota. 2020. Factual Imperfective Contexts in Polish. *Studies in Polish Linguistics*. Wydawnictwo Uniwersytetu Jagiellońskiego 15(3). 103–127.
- Mailhammer, Robert & Patrick Caudal. 2019. Linear Lengthening Intonation in English on Croker Island: identifying substrate origins. *JournaLIPP* 6. 40–56.
- Martin, Fabienne & Hamida Demirdache. 2020. Partitive accomplishments across languages. *Linguistics* 58(5). 1195–1232. <https://doi.org/10.1515/ling-2020-0201>.



6 Vedic-Prose *ta*-participles with genitive “agents” revisited — Hans Henrich Hock University of Illinois, USA

Vedic-Prose *ta*-participle structures with genitive agents, as in (1), have been discussed in some detail by Oertel (1939), Jamison (1990), and Hock (2006). Although admitting affinity with adnominal and dative-like genitives, Oertel concludes that the parallelism of instrumental and genitive in such structures shows

genitive marking is an alternative to the instrumental for passive agents. Focussing on tense-aspect, Jamison argues for present-value of structures with genitive agents. Hock combines the two earlier approaches, arguing that genitives mark affected-agents and that these constructions are non-eventive, stative-intransitive, while instrumental-marked structures are eventive.

This paper argues that Hock's distinction between non-eventive/stative-intransitive and eventive is on the right track as far as aspectual features go, but beyond that, genitive marking does not mark agency but affectedness and structures with genitive marking are comparable to oblique-agent constructions. This proposal also accounts for the fact that genitive "agents: are animate/personal (see Andersen 1986 and Oertel 1939), while instrumental agents are not restricted in this manner.

In the conclusion I consider the issue of how to reconcile the *vartamāne* of Pāṇini 2.3.67 with the Vedic-Prose tense-aspect facts, referring to earlier accounts by Cardona 1970, Jamison 1990, and Hock 2006.

- (1) *agnihotrām evā + asya* [GEN] *hutām bhavati* (ŚB 11.6.2.9)
 'The agnihotra is offered **for his benefit.**'
 Or: 'The agnihotra is offered by him/He offered the agnihotra.' (?)

References

- Andersen, Paul Kent. 1986. The genitive agent in Rigvedic passive constructions. *Collectanea linguistica*, 9-13. (Prace Komisji Językoznawstwa, 53.)
 Cardona, George. 1970. The Indo-Iranian construction *mana (mama) krtam*. *Language* 46.1-12
 Hock, Hans Henrich. 2006. *Ta*-participles with genitive agents in Vedic Sanskrit: Was Pāṇini right? *Sanskrit Studies Centre Journal, Silpakorn University, Bangkok, Thailand*, 2: 24-49.
 Jamison, Stephanie. 1990. The tense of the predicated past participle in Vedic and beyond. *Indo-Iranian Journal* 33: 1-19.
 Oertel, Hanns. 1938, 1939. *Zu den Kasusvariationen in der vedischen Prosa, 2 and 3*. (Sitzungsberichte der Bayerischen Akademie der Wissenschaften, Phil.-hist. Abt., 1938:6, 1939:6.)



7 *The typology of apprehensives in South Asian languages and their geolinguistics* — Peter Edwin Hook University of Michigan and University of Virginia, USA.

Fear may be seen as composed of three elements: uncertainty, mental image, and negative desire. Individual languages choose two or three of these constituents to represent the totality of fear. This paper compares and contrasts constructional manifestations of fear in sixteen Indo-Aryan languages (see data on page 2) from geographical and typological points of view.

An informal survey was carried out by examining Google's translations into Indo-Aryan languages of the Russian sentence *опасалась, как бы он не убил тебя* and English '(X) was afraid he might kill you.' The accuracy of the resulting versions was verified by searching for examples of them on-line or, if those were unavailable, by searching for examples of closely related utterances.

1. In all languages negative desire is expressed lexically by words meaning 'fear'. The source of fear is almost always expressed in the complement as a negative, undesirable event.
- 2.
3. Mental images in Hindi-Urdu and many other Indo-Aryan languages can be made sharper or more vivid by the use of compound verbs: *mār de-* 'kill GIVE', *mār dāl-* 'kill THROW' or *mār chad'* - 'kill LEAVE' instead of their non-compound counterpart *mār-* 'kill'. Use of the compound verb instead of the non-compound in the complements of expressions of fear and

anxiety is found in a nearly continuous band across the Indo-Gangetic Plain from Sindh to Punjab to Awadh and in Marwari, Sindh, and Gujarati as well.

4. Uncertainty. Expression of this element shows typological and geographic variation.
 - a. Use of the subjunctive allows the speaker / writer to avoid commitment to either occurrence or non-occurrence of the feared event. Alternatives less specific in this regard include the future (Chattisgarhi, Bengali, Marathi) or modals such as Dogri's *sag-*, Oriya's and Assamese's *pār-* 'be able to' and Konkani's *ye-* 'come; be able to'.
 - b. The inclusion of an adverb explicitly signaling doubt such as Hindi's *kahī̃*, Panjabi's *kidhare / kite*, or Gujarati's *kyāñk* 'somewhere' => 'lest'. These adverbs occur in languages spoken in the Indo-Gangetic Plain west of Bengal.
 - c. The presence of a seemingly otiose negative particle *na, nā, nī, nī̃* in Indo-Aryan languages spoken across the Indo-Gangetic Plain [similar to the expletive negative particle in English 'I wonder if he isn't already here'] indicates doubt.
 - d. An explicit question marker or interrogative particle in Nepali, Marathi, Tamil.

Does the geographic distribution of the absence of these traits reflect Dravidian influence on the more southerly languages of the Indo-Aryan group (Marathi, Konkani, Oriya) and Tibeto-Burman influence on those spoken to the north of the Indo-Gangetic Plain (Kashmiri, Dogri, Dawoodi, Nepali, Assamese)? Perhaps a related question: May the more thoroughly left-branching Tibeto-Burman and Dravidian languages spoken to the north and in the south of India have had the effect of promoting the loss of explicit markers of fear such as Hindi-Urdu's otiose *na* and its particle of doubt *kahī̃* in languages spoken on the margins of the Indo-Aryan heartland? In what order are they lost in the transition from fully endowed independent clause (1h) showing all four constructional traits to stripped down constructions showing none of the traits?

Hindi-Urdu: full set of four traits ('lest', compound verb, negative of doubt, subjunctive)

A partly filled search string or translational prompt: “ डर था कि कहीं * गिर न ”yields:

- (1h) हर कदम पर मुझे डर था कि कहीं मैं गिर न जाऊं या कोई बाधा मुझे रोक न दे
 har kadam-par mujhe dar thā ki kahī̃ māī gir na jāū̃
 each step-at me fear was that lest I fall NEG GO.SBJNC
 yā koī bādā mujhe rok na de
 or some obstacle me stop NEG GIVE.SBJNC
 'At every step I was afraid I might fall or some obstacle might stop me.' [dlrs.bihar.gov.in]

From searches of on-line sources, it is apparent that in Hindi-Urdu's fear-clauses the compound verb is preferred to its simple verb counterpart. In fact, apart from modals and phasal auxiliaries, the use of the compound verb in such clauses is obligatory. In this respect Hindi-Urdu conditions the compound verb for the same reasons that inform one of the defining uses of the perfective aspect in Russian: "The total event with its undesirable consequences, is ... a threat ever present in the speaker's mind." J. Forsyth 1970:257.

This obligatoriness of the compound verb in fear-clauses in Hindi-Urdu, Punjabi, and other languages spoken in the central and western Indo-Gangetic Plains opens the question of speakers' mental states in other areas of South Asia where the compound verb in fear-clauses is optional or absent altogether. Is a general typological distinction between speaker-responsible vs. hearer-responsible languages tenable? If so, can geographical accessibility and an uneven history of settlement be considered as partial explanations?

The completed paper will test the findings presented in this abstract with parallel data sets sourced from independent translators such as Bing, Яндекс, on-line searches, and personal judgments.

Search strings / prompts: (X) was afraid Y might kill you; как бы он не убил тебя, என்ற பயந்த-

Four explicit traits or features (**'lest'**, **compound verb**, expletive **negative (EN)**, **subjunctive**)

Hindi-Urdu: मुझे डर था कि कहीं वह तुम्हें मार न डाले

Awadhi: हमका डर रहा कि कहीं ऊ तोहका मार न दे

Bhojpuri: हमरा डर रहे कि कहीं ऊ तोहरा के ना मार देव

Punjabi: ਮੈਂ ਡਰ ਸੀ ਕਿ ਕੋਈ ਉਹ ਤੁਹਾਨੂੰ ਮਾਰ ਨ ਦੇਵੇ

Gujarati: dar hato ke [te kyānk ātmahatyā na kari le]

Marwari: mha-nāṁ dar ho kə kaṭhāṁ bo thā-nə nī mār devə

Three explicit features (**'lest'**, **compound verb**, **negative of doubt**)

Maithili: हमरा डर छल जे कहीं ओ अहाँके नहीं मारी देत

Two explicit features (**compound verb**, **subjunctive**)

Sindhi: mu-khe dap ho ta ho to-khe mār čhad'ě

me-DAT fear was that he you-ACC kill LEAVE.SBJN

Two explicit features (**"lest"**, **question marker**)

Nepali: ma katai bhatk-in-čhu ki bhanne dar čha

I "lest" break-PASS-1sg QM QUOT fear is 'I am afraid I may break.'

Two explicit features (**compound verb**, **question marker**)

Telugu: [atanu ninnu tsamp-ēs-tā-d.ēmō.n] an-i nēnu bhaya-paḍ.ḍā-nu (with the help of
he you.ACC kill-DROP-FUT-M3sgQM? QUOT I fear-felt-1sg K. V. Subbarao)

Tamil: [avaṅ unṅaiḱ koṅru-viṭuv-āṅ-ō]-eṅru nāṅ payantēṅ (with help of Neela Bhaskar
he you.ACC kill-LEAVE-3sgM-QM-QUOT I feared.1sg and Murugan Looker)

One explicit feature (**compound verb [or perfective]**):

Pashto: zə wed-ed-am če haḡá bə tā wə-waʒən-i

I fear-PRES-1sg that he FUT you.OBL PRFCTV-kill.PRES-3sg

Chattisgarhi: मोला डर रिहिस के वो तको मार देही।

Bengali: āmi bhaya peyechhilāma ye se āpanāke mer.e-phel-be

I fear received that he you.ACC kill.GER-THROW-FUT

One explicit feature (**'lest'**):

Dogri: डरदा हा कि कहीं ओह तुहानू मार सगदा

Kashmiri: mye ōs khauph tsi mā tsat-akh kul 'I was afraid you might cut down the tree.'
me.DAT was fear you "lest" cut-2sg tree (from Hook and Koul 1992:11)

No explicit feature:

Marathi: [to ātmahatyā kar-el] aśi bhiti vāṭat hoti

Konkani: [तो तुका मारूं येता] असो भय आशिल्लो

Assamese: ভয় হৈছিল সি তোমাক হত্যা কৰিব পাৰে bhoy hoisil si tumak hotya karib pare
fear was he you.ACC killing do can

Oriya: ମୁଁ ଭୟ କରୁଥିଲି ସେ ତୁମକୁ ମାରିଦେଇପାରେ mun bhaya kali se tumaku hatya kari pare
I fear did he you.ACC killing do can

Tibetan: ŋa [kho-s khyod bsad srid] pa bsam nas zed soṅ

I he-ERG you.ABS kill might NMLZR thinking CAUS fear WENT

'I was afraid, thinking he would kill you.' (with the assistance of Nicolas Sihle)



8 *On the two verbally unmarked forms -(y)aa and -taa in Hindi* — Annie Montaut (SEDYLIInalco/CNRS/IRD)

The presentation aims at discussing some proposals about the position of the most simple forms within the constellation of the Hindi verb, supposed to bear either aspect *-(y)aa* or mood *-taa*. An analysis differing from the standard assumption (*-aa*: perfective, *-taa*: conditional) allows for a better understanding of the expected correlations at the semantic and syntactical level within the language, as well as for inter-linguistic comparison.

I will first deal with the constellation of functions/meanings of the finite verb word ending in *-(y)aa* in Hindi, highly atypical in a cross-linguistic perspective in the distribution of suffixes forming the various tenses. Can the unmarkedness of the form (no TAM markers) account for its aoristic meanings, both as an “eventual” with future orientation in hypothetic systems and as a mirative modality in exclamation-like statements? I will then turn to another verbal word devoid of tense/mood/person marks, the form *-taa*, yet allowing for the so-called aspectual marker *-t-*. Can this morphological particularity account for both its well described use as a counterfactual in hypothetic systems and its hardly described use as “routine” or “indefinite” imperfect?

The attempt for explaining this atypical scenario of both morphologically quasi non-verbal words in the Hindi finite verb paradigm is based on my previous work on the topic (Montaut 2006, 2016, 2020), adding new considerations in relation to the interaction of morphological features and behavioural properties in the modern verbal system (Haspelmath 2010), beyond the diachronic explanations and grammaticalization paths (Bybee & al., 1994, Nicolle 2012) accounting for its present appearance.

References

- Bybee, Joan, R.D. Perkins & W. Pagliuca (eds.). 1994. *The Evolution of grammar, tense, aspect and modality in the Languages of the World*. Chicago-London: Chicago Univ.Pr.
- DeLancey, Scott. 1997. Mirativity, the grammatical marking of unexpected information, *Linguistic Typology 1-1*, 33-52
- Haspelmath, Martin & Sims Andrea D. 2010. *Understanding morphology*, Hodder Edition
- Montaut, Annie. 2016. The verbal form *-(y)ā* in Hindi/Urdu: An Aorist with "aoristic" meanings. In Guentchéva Zlatka (ed.). *Aspectuality and Temporality: Descriptive and Theoretical Issues*, 413-446. Benjamins, Studies in Language Companion Series.
- Montaut, Annie. 2020. Grammaticalization of participle and gerunds in Indo-Aryan languages: Preterite, future, infinitive. In Malcukov, Andrej & Bisang Walter. *Grammaticalization Scenarios from Europe and Asia*, Mouton de Gruyter, 2020 (vol 1: Europe and Asia, chapter 5).
- Montaut, Annie, 2006. « Figures du sujet énonciateur », dans : *Antoine Culioli, Un homme dans le langage*, Gap, Ophrys, 187-208
- Narrog, Heiko, 2005. “Modality, mood, and change of modal meanings: A new perspective”. *Cognitive Linguistics*, 16, 677–731
- Nicolle, Steve, 2012. “Diachrony and grammaticalization in Tense Aspect systems”, in Binnick, Robert (ed.), *The Handbook of Tense and Aspect*, Oxford University Press



9 *Light Verb Stubbornness (put and show in Sinhala)* — Benjamin Slade University of Utah, USA

The origin and historical development of light verb constructions [VVs] in Indo-Aryan [IA] has long been the subject of investigation and debate (e.g., Hook 1991, 1993; Butt & Lahiri 2002, 2013; Butt 2010; Slade 2013, 2016, 2020, 2021). Butt (& Lahiri) argue against a view of VV constructions as grammaticalising towards aspectual auxiliaries, and argue that light verbs are historical “pertinacious”: stable and resistant to

certain types of change. Objections to certain aspects of this view have been raised (Hook & Pardeshi 2005; Slade 2013; Ittzés 2022), and here I try to sort out some areas of consensus and disagreement, drawing on data from Sinhala in addition to other IA languages.

Slade (2013) – while, like Butt, rejecting the view of light verbs as an intermediate position on a grammaticalisation cline – argues against a “strong pertinacity hypothesis”, largely on four points: (a) difficulties in the evidence for a picture of an unbroken legacy of VV constructions from Vedic to New Indo-Aryan [NIA]; (b) the wide variation in light verb inventories across NIA; (c) significant differences in the morphosyntactic properties of such systems; (d) cases which appear to be counterexamples to the claim that light verbs cannot (sometimes) develop into auxiliaries.

Point (c) can probably be set aside here, as morphosyntactic instability involving VVs could be compatible with the lexical sort of pertinacity suggested by Butt. (a) is not insignificant, but absence is a trickier basis to argue from than presence. (b) complicates the notion of a stable set of light verbs whose VV uses are fairly straight-forwardly derivable synchronically from their full verb meanings, and (d) seems the most contentious issue.

Addressing points of consensus and disagreement on both empirical and theoretical issues, I focus my discussion here on Sinhala VVs, as these are attested from at least the 8th century and three of these (GO *ya-*, TAKE *gan-*, GIVE *de-*) are still found in modern Sinhala: which seems supporting empirical evidence for at least a “weak” pertinacity hypothesis of light verbs, and an ideal sort of test case for some of the questions around the tenacity of light verbs.

And here, even with millennium-length endurance, there is important change: two new light verbs (COME *enāvā*, OPEN *arināvā/ærenāvā*) appear in modern Sinhala. And change within what persists: e.g., *ya-* (GO) becomes restricted to only combining with participles of *gan-* itself compounded with another verb; and now contributes a “durative” rather than completive sense in modern Sinhala.

Further, and more crucially, two verbs (PLACE/PUT *la-* and SHOW *pa-*) which appeared in early Sinhala with clearly light verb—not auxiliary—functions now lack any light verb uses in modern Sinhala, and we find instead two auxiliaries (a “new” overt conjunctive participle marker and an imperative marker, respectively) etymologically from the same two full verbs, occurring in the same syntactic positions occupied by their light verb counterparts in Old Sinhala. And the full verbs themselves did not disappear – *lanāvā* continues as the default verb for “put/place” and *pānnāvā* for “show” – just their light verb uses.

These data have traditionally (Paranavitana 1956) been analysed as grammaticalisation of these two light verbs into auxiliaries; given the particulars, I argue that they indeed should be, and walk carefully through the pieces involved. At the same time, the other aspects of these data do support an understanding of light verbs as sometimes very tenacious, if not universally pertinacious.

Bibliography

- Butt, Miriam. 2010. The Light Verb Jungle: Still Hacking Away. In M. Harvey, M. Amberber, & B. Baker (eds.), *Complex Predicates in Cross-Linguistic Perspective*, 48–78. Cambridge: Cambridge University Press.
- Butt, Miriam & Lahiri, Aditi. 2002. Historical stability vs. historical change. Ms., Universität Konstanz.
- Butt, Miriam & Lahiri, Aditi. 2013. Diachronic pertinacity of light verbs. *Lingua* 135: 7–29.
- Hook, Peter Edwin. 1991. The Emergence of Perfective Aspect in Indo-Aryan Languages. In Elizabeth Traugott and B. Heine (eds.), *Approaches to Grammaticalization*: 59–89. Amsterdam: Benjamins.
- Hook, Peter Edwin. 1993. Aspectogenesis and the Compound Verb in Indo-Aryan. In Manindra Verma (ed.), *Complex Predicates in South Asian Languages*: 97–113. Delhi: Manohar Publishers & Distributors.
- Hook, Peter Edwin & Pardeshi, Prashant. 2005. Are vector verbs eternal? Paper given at South Asian Linguistic Analysis (SALA)-25, University of Illinois, Urbana/Champaign.
- Ittzés, Máté. 2022. Light verb, auxiliary, grammaticalization: The case of the Vedic periphrastic perfect. *Die Sprache* 54: 95–129.

- Paolillo, John C. 1989. Deictic and dynamic interactions in Sinhala verb-verb compounds. Ms., Stanford University.
- Paranavitana, Senarat. 1956. *Sigiri graffiti, Sinhalese verses of the eighth, ninth and tenth centuries*. London: Oxford University Press.
- Pokharel, Madhav P. 1991. Compound verbs in Nepali. *Contributions to Nepalese Studies* 18(2). 149–173. (Reprinted in *Topics in Nepalese Linguistics*, Yogendra P. Yadava & Warren W. Grovers (eds.), 1999: 185–208. Kathmandu: Royal Nepal Academy).
- Slade, Benjamin. 2013. The diachrony of light and auxiliary verbs in Indo-Aryan. *Diachronica* 30: 531–578
- Slade, Benjamin. 2016. Compound verbs in Indo-Aryan. In Hans Henrich Hock & Elena Bashir (eds.), *The languages and linguistics of South Asia: A Comprehensive Guide*. Berlin: De Gruyter.
- Slade, Benjamin. 2020. Verb concatenation in Asian linguistics. *Oxford Research Encyclopedia of Linguistics*.
- Slade, Benjamin. 2021. Development of verb-verb complexes in Indo-Aryan. T. Kageyama, P. E. Hook, & P. Pardeshi (eds.), *Verb-verb complexes in Asian languages*. Oxford University Press.
- Wijemanne, Piyaseeli. 1984. *Amāvatura, a syntactic study*. Colombo: Ministry of Higher Education.



10 Formal and Functional Criteria: Some cases of a Symbiotic Relationship — K.V. Subbarao University of Delhi, India

There have been many studies that demonstrate the significance of formal criteria in syntax. While formal criteria are crucial for an explanatorily adequate analysis of the language, this paper aims to show that functional criteria too play an important role in effecting syntactic phenomena in a sentence.

- (a) There are some specific fascinating facts in Dravidian languages and in Hindi and the other Indo-Aryan languages with regard to the **absence** of the deontic interpretation of with modals in the non-nominative subject constructions. (Bhaskararao & Subbarao 2002, Subbarao 2012). For a wider applicability of this fact, we intend to verify the validity this hypothesis in those Tibeto-Burman languages that have the non-nominative subject construction.
- (b) An interesting feature in Hindi is the absence of the dative case marker *only* in the desiderative construction, as in:

- (1a) har ek ādmī lakhpati bannā cāhiye.
'Every man should become a millionaire.'
- (1b) har ek insān swasth rahnā cāhiye.
'Every human being must be healthy.'

(1a) & (1b) show that non-syntactic (semantic or functional) criteria play a role in effecting a syntactic phenomenon with regard to the absence of a lexical case marker *ko* that is otherwise obligatory elsewhere. Interestingly, such absence of the case marker is NOT permitted in the **other** non-nominative constructions of the following type:

2. har ek insān ke do hī bacce hō.
'Every human being should have two children.'
3. har ek insān ke pās paisā honā cāhiye.
'Every human being should have money.'
4. har ek insān mē sāhas/tākat honā/honī cāhiye.
'Every human being must have courage/strength.'

The postpositions *ke*, *ke pās* and *mē* cannot be dropped though sentences (2) - (4) are examples of a desiderative construction.

The specific question that needs to be further investigated is: what type of desiderative constructions, if any, permit such absence of the postposition and why the other non-nominative constructions do not? We argue that such ambiguity between deontic and non-deontic interpretation arises only in the case of the dative subject construction and it is such possibility that permits the absence of the dative case marker that leads to a desiderative interpretation.

In support of this assertion that non-syntactic (semantic or functional) criteria play a role in effecting syntactic phenomena, we shall present some further cross-linguistic evidence from the Kherwarian (North Munda) languages.

(c) In Santali, Mundari and Ho, for example, functional criteria play a role in the reversal of the position of the Object Agreement marker and Subject Agreement marker. The Object Agreement marker takes the position of the Subject Agreement marker in the non-nominative constructions in specific functional/semantic domains. (Subbarao & Everaert 2021).

Santali (Munda)

Nominative Subject Construction

5. *iŋ* *hopni-ŋ* *ŋel-le- d- e(y)- a*
 I Hopni-SAM see-pst-[+tr]-OAM-[+fin]
 ‘I saw Hopni.’

Non-Nominative Subject Construction

Agreeing pattern with *mena?* - ‘be’, genitive incorporated:

6. *ij-ak’ kitəbmena?-t-ij-a*
 I-genbookbe-gen-1sg-[+fin]
 ‘I’ve a book.’ (Minegishi & Murmu 2001: 151)

Non- Agreeing Pattern – no genitive incorporation in the verb:

7. *ij-ak’ kitəbmena?-a*
 I-gen bookbe-[+fin]
 ‘I’ve a book.’ (Minegishi & Murmu 2001: 150)

SAM stands for Subject Agreement Marker and OAM stands for Object Agreement Marker. [fin] stands for finite.

References

- Bhaskararao, P. and K. V. Subbarao. 2004. Non-nominative Subjects, vols. I and II. Amsterdam/Philadelphia: John Benjamins.
- Minegishi, M. and G. Murmu. 2001. Santali Basic Lexicon with Grammatical Notes. ILCAA, Tokyo University of Foreign Studies, Tokyo.
- Subbarao, Karumuri V. & P. Bhaskarao. 2004. Non-nominative Subjects in Telugu. In: Bhaskararao, P. and K. V. Subbarao. Non-nominative Subjects, vol I. Amsterdam/Philadelphia: John Benjamins.
- Subbarao, Karumuri V. 2012. South Asian languages: A Syntactic Typology. Cambridge: Cambridge University Press.
- Subbārão. Karumuri V. & Everaert, Martin . 2021. Agreement Reversal In Munda Languages: An Interplay Of Functional/Thematic And Syntactic Criteria. In: In: Munda Linguistics, (ed.) Shailendra Singh. Cambridge: Cambridge Scholars Publishing.



Open Submissions

11 *Perfective and Imperfective systems in Kherwarian languages* — G. Anderson & Bikram Jora Living Tongues Institute for Endangered Languages

Tense/aspect systems across the Kherwarian Munda languages are structurally and semantically mostly conflated in broad details but on the micro-level present a complex picture that makes it difficult to historically generate proto-forms of the earlier proto-Kherwarian system in specific cases. It appears in most cases that the elements were grammaticalized first in a particular aspectual meaning and then shifted to more generalized tense functions. Therefore, these verbal categories are treated here under a single heading. However, TAM marking is also connected to valence, lexical semantics and Aktionsart as well. Frequently it is difficult to understand the semantic value of the use of a given TAM marker in specific contexts as these often additionally reference not only lexical aspect and grammatical aspect but also pragmatic information that the speaker hopes to convey in terms of salience, affectedness, focus, etc. In this talk, we address several topics of wider interest that various Kherwarian languages exhibit.

Anderson (2007) divided the Kherwarian verbal system into two series of inflectional tense/aspect markers: Series-A (imperfective or non-past meaning) and Series-B (perfect/perfective). Both show subcategories but the most complex system of TAM marking seen in different Kherwarian languages such as Mundari, Ho or Santali lies in the perfective series, and the recruitment of specific originally perfective forms into new imperfective functions. This historical distinction between the perfective and imperfective series in Kherwarian since the imperfective series arose more recently from various auxiliary verb constructions and regrammaticalization of perfective forms as imperfective. Note that the Proto-Kherwarian perfective series is likely inherited both from Proto-North Munda with cognates in Korcu as well. Both external comparison and internal reconstruction of the perfective series reveals an even older connection to diachronically prior structures with cognates in other branches of Munda such as Sora-Gorum, Kharia and Gutob-Remo and Juang (Anderson and Jora, 2018).

Taking a functional synchronic perspective, the same function in Kherwarian may be encoded by unrelated TAM forms depending on whether the verb stem is specified as, or to be interpreted as, active/transitive or middle/intransitive, e.g. in Bhumij (1). Further complicating the function and historical interpretation of individual elements in this closely related group of languages are facts like that in Santali, the selection of a particular TAM marking may change the lexical meaning of the stem (2).

- (1) a. soma sen-ta-n-a=?e
soma go-PROG-ITR-IND=2SG:SUB
'Soma is going.' (Ramsawami, 1992:98)
- b. aben sen-o-tan-a-ben
2DL go-INGR-PROG-IND-2DL:SUB
'You are going.' (Ramsawami, 1992:94)
- c. ape nu?u-dʒa?-t-a=pe
you drink-ASP-TR-IND=2PL
'you are drinking it.' (Ramsawami, 1992:94)
- d. aiŋ hətʃa-ke lel-dʒi-a-iŋ
1SG man-OBJ see-INGR-IND-1SG
'I am looking at a man.' (Ramsawami, 1992:99)
- (2) a. gai-ko ətɪŋ dʒoŋ-kana
cow-PL graze -IPFV-IND
'The cows are grazing.' (Campbell, 1953)
- b. simko ətɪŋ-etkoa
fowl-PL feed- IPFV-3PL-IND

‘They feed the fowls.’ (Bodding, 1936:169)

References

- Anderson, G. D. S., 2006. Auxiliary verb constructions, Oxford: Oxford University Press. Anderson, G. D. S., 2007. The Munda verb: typological perspectives, Berlin: Mouton de Gruyter.
- Anderson, Gregory D.S. & Jora, Bikram. 2018. Negation, TAM and person-indexing interdependencies in the Munda languages: A preliminary report. In Ring, Hiram & Rau, Felix (eds.), Papers from the Seventh International Conference on Austroasiatic Linguistics (JSEALS Special Publication 3), 36-59. Honolulu: University of Hawai‘i Press.
- Bodding, P. O., 1929-36. A Santal dictionary, Vol. 1-5, Oslo: A.W. Broggers Boktrykkeri. Campbell, A., 1953. Santali-English dictionary, 3rd edn, Benegaria: Santal Christian Council. Ramswami, N., 1992. Bhumij grammar, Mysore: Central Institute of Indian Languages.



12 Exploring Tense, Aspect, and Modality in Telugu: A Comprehensive Linguistic Analysis — Zelalem Girma Abate & Atreyee Sharma EFL University, Hyderabad, India

This research inquiry examines tense, aspect, and modality in Telugu, a prominent Dravidian language spoken mostly in the Andhra Pradesh and Telangana states of India. Telugu’s extensive morphological and syntactic elements provide a distinct perspective on how temporal events, states, and actions are articulated. By focusing on specific verbs, this study elucidates the subtle functions of tense, aspect, and modality in Telugu, drawing on both conventional grammar and contemporary linguistic theory.

The paper navigates with an examination of tense in Telugu, which covers past, present, and future tenses. In contrast to English which frequently utilizes auxiliary verbs to indicate tense, Telugu uses verb inflections. Verbs in Telugu are frequently conjugated to indicate tense, person, and number. For example, the verb ‘drink’ (తాగు, *tā:gu*) changes to ‘తాగాను’ (*tā:ga:nu*) for past tense (‘I drank’), ‘తాగుతాను’ (*tā:gu t̄a:nu*) for present tense (‘I drink’), and ‘తాగుతాను’ (*tā:gu t̄a:nu*) for future tense (‘I will drink’).

Aspect, which indicates the essence of an activity in relation to time, is investigated using perfective and imperfective categories. The perfective aspect suggests finished activities, as in ‘I have taught’ (చెప్పాను, *t̄ɛp:a:nu*), but the imperfective denotes ongoing or habitual actions, as in ‘I am teaching’ (చెప్పుతున్నాను, *t̄ɛp:uɽ̄nna:nu*). In the same way, ‘I have seen’ (చూసాను, *t̄ɪu:sa:nu*) versus ‘I am seeing’ (చూస్తున్నాను, *t̄ɪu:st̄unna:nu*), and (ప్రార్థించాను, *pra:rt̄h̄int̄j̄a:nu*) versus ‘I am praying’ (ప్రార్థిస్తున్నాను, *pra:rt̄h̄ist̄unna:nu*). Such models prove how aspectual variations are encoded in verb morphology and how aspectual elements and auxiliary verbs change the main verb.

Modality, or the speaker’s attitude toward an action or situation, is communicated by modal auxiliaries and particles. Telugu verbs like ‘necessity’, ‘possibility’, ‘permission’, and ‘ability’ show how modality is stored in conversations. For example, ‘I must drink’ (తాగాలి, *tā:ga:li*) indicates necessity, and ‘I can drink’ (తాగగలను, *tā:gaganu*) indicates ability. Related constructions are analyzed for ‘teach’ (చెప్పాలి, *t̄ɛp:a:li*; చెప్పగలను, *t̄ɛp:aganu*), ‘see’ (చూడాలి, *t̄ɪu:da:li*; చూడగలను, *t̄ɪu:ḍaganu*), and ‘pray’ (ప్రార్థించాలి, *pra:rt̄h̄int̄j̄a:li*; ప్రార్థించగలను, *pra:rt̄h̄int̄j̄aganu*). These illustrations indicate the syntactic placements of modal expressions and how they relate with tense and aspect.

This research focuses on the relationship between tense, aspect, and modality. Understanding this dynamic is key for appreciating Telugu’s entire semantic depth. For instance, ‘I might have drunk’ (తాగి ఉండవచ్చు, *tā:gi uḅḍavat̄j̄u*) combines past tense, perfective aspect, and modal possibility. The methodology connects descriptive and theoretical approaches, drawing on a collection of modern Telugu literature, native speaker insights, and previous grammatical studies (Krishnamurti, 2003; Subbarao, 2012;

Steever, 1998). This approach ensures a thorough investigation, adding to the subject of Dravidian linguistics and improving our grasp of tense, aspect, and modality in Telugu.

In sum, this study provides a comprehensive examination of Telugu tense, aspect, and modality, exploring linguistic mechanisms and their interrelationships. This study not only improves our understanding of Telugu grammar, but it also deals with concepts that can be applied to other languages with multifaceted temporal and modal structures.

References

- Krishnamurti, Bhadriraju. (2003). *The Dravidian Languages*. Cambridge University Press.
 Subbarao, K.V. (2012). *South Asian Languages: A Syntactic Typology*. Cambridge University Press.
 Steever, Sanford B. (1998). *The Dravidian Languages*. Routledge.



13 *Suppletive Copula of Khatri: A Case of Language Contact* — Antonia Alvares Department of Linguistics, University of Hong Kong

Cross-linguistically, it is common for the copula verb to have either a suppletive paradigm (Veselinova 2006: 115–116), or to exhibit irregularities (Veselinova 2006: 118). Khatri, an Indo-Aryan contact language spoken by the Savji community in Belagavi, India, has a suppletive copula paradigm according to tense that is argued to be due to language contact. Direct borrowing in intense language contact has been cited as a source of suppletion in the context of suppletive imperatives (Veselinova 2006: 141). This study suggests that intense language contact has resulted, in the case of Khatri, in a suppletive copula paradigm.

Khatri is characterized by having significant lexical and grammatical influence from Gujarati and Marathi and to a lesser extent from Hindi. The Gujarati influence in the language is surprising given that the speakers a) do not speak Gujarati, and b) live in places where Gujarati is not widely spoken. For the present tense, Khatri speakers employ the Gujarati copula *ī^he*. A comparison of Khatri example (1) with Gujarati example (2) shows that in the Khatri example the 3SG Gujarati person suffix i.e. *-e* has fossilized and is part of the root.

- (i) *ḡev ī^he*.
 god COP.PRS
 ‘There is a God.’ (Khatri)
- (ii) *b^həgvaṅṅ ī^h-e*.
 god COP.PRS-3SG
 ‘There is a God.’ (Gujarati)

In Khatri, the past form of the copula i.e., *hoḡ-*, corresponds to that used in Marathi; however, with the gender inflection being identical with that of Gujarati. There is further evidence of borrowing from Hindi: a defective cell in the copula paradigm of Gujarati and Marathi is that of the imperative. Khatri, however, has an imperative form of the copula which is identical with that of Hindi.

Semantically, Khatri follows the pattern seen in western Indo-Aryan languages like Marathi and Hindi (Deo 2020) of maintaining a distinction between generic and specific readings through the use of different copulas. In Khatri, this switch in readings is achieved through two copulas: one identical with that in Gujarati i.e., *ī^he*, and the other which is argued to be from Marathi i.e., *əsəṭs*. However, in Khatri, this switch is only available in the present tense.

Regarding tense expressed by an auxiliary, Khatri, in contrast to Gujarati, Hindi, and Marathi, does not use the copula as an auxiliary to express tense when the verb is inflected for perfective or imperfective

aspect. Notwithstanding the extent of borrowing, the suppletive copula of Khatri therefore exhibits divergences from those of Gujarati, Marathi, and Hindi.

Abbreviations

3=third person; COP=copula; SG=singular

References

- Deo, Ashwini. 2020. The particular–characterizing contrast in Marathi and its historical basis. In Dankmar Enke, Larry Hyman, Johanna Nichols, Seiler Guido & Weber Thilo (eds.), *Language change for the worse*, 183–211. Berlin: Language Science Press.
- Veselinova, Ljuba N. 2006. *Suppletion in Verb Paradigms* (Typological Studies in Language 67). Amsterdam: John Benjamins.



14 *Modal Verbs and Complementation across South Asia: a comparative semantics* — Diti Bhadra Assistant Professor, Institute of Linguistics, University of Minnesota, USA

How far does the semantics of a clausal complement affect the semantics of the selecting predicate and conversely, how does the semantics of the predicate determine the types of clausal complements it allows? These continue to be fundamental questions in clausal complementation (Grimshaw 1979; Bresnan 1972; Moulton 2009; a.m.o). In this work, I investigate these questions from the viewpoint of the semantics of **deontic modal verbs** denoting *prohibition* and *obligation* and their mandatorily **non-finite clausal complementation** patterns.

My empirical and theoretical focus, driven by original semantic fieldwork funded by the NSF, is on languages spanning all 4 major South Asian language families. Overall, there is little work on the compositional interaction between modal verbs + complements. While incrementally building the empirical landscape by collecting systematic and *comparable* data, my aim is to bring South Asian patterns to bear on mainstream theories about modality, complementation, compositionality.

(1) Tibeto-Burman languages studied: Meiteilon, Ao, Adi, Lepcha, Bhutia

sinmi-siŋ	k ^h ut	həmdok-pi-gə-də-bə-nɪ	[Meiteilon: obligation +
employee-PL	hand	wash-APL-POT-NEC-NMLZ-COP	nominalized complement only]

‘Employees must wash their hands.’

sərkar-nə	skul-siŋ-də	tʃəjɛtɲəbə	lairik-siŋ	ʔak-pə	t ^h ɪŋ-ɛ
govt.-NOM	school-PL-in	controversial	book-PL	teach-NMLZ	prohibit-PERF

Lit: ‘The local officials prohibited schools to teach controversial books.’
[Meiteilon: prohibition + nominalized complement only]

(2) Austro-Asiatic languages studied: Khasi, Santali, Pnar

ki	noŋ-k ^h ai	ki	hap	ban	siew	k ^h adʒana	[Khasi: Obligation + infinitival
3PL	people-business	3PL	must	INF	pay	tax	complement only]

‘Business owners must pay taxes.’

la	k ^h aŋ	pyrfah	ban	dih	duma	haŋne	[Khasi: Prohibition +
3SF	close	prohibit	INF	smoke	cigarette	here	infinitival complement only]

Lit: ‘You are prohibited to smoke here.’

(3) **Indo-Aryan languages studied: Bangla, Assamese, Odia, Rajbanshi**

c ^h atro- <u>ḡ</u> er	ek ^h ane	*d ^h ok-a / d ^h uk-te	hōbe	[Bangla: Obligation + infinitival complement only]
student-CL	here	enter-NMLZ / enter-INF	have-to	

‘Students must enter here.’

c ^h atro- <u>ḡ</u> er	ek ^h ane	d ^h ok-a / d ^h uk-te	nɪʃɛd ^h	[Bangla: Prohibition + either nominalized or infinitival complement]
student-CL	here	enter-NMLZ / enter-INF	prohibited	

‘Students are prohibited to enter here.’

(4) **Dravidian languages studied: Telugu, Malayalam, Kannada** (not shown for space reasons)

Only a few representative patterns are shown here; the talk will go into much more detail.

(5) Comparison with **English**:

Obligation + infinitival only: The company laws **require** employees **to** declare any workplace relationships. (Nominalized: *..require employees **declaring**..)

Prohibition + nominalized only: The store **prohibits** guests from **bringing** guns. (Infinitival: *..prohibit guests **to** bring..)

Keeping structural differences such as affixal complexity, etc. aside, a **few typologically diverse systems emerge**:

- (1) where prohibition, obligation take only nominalized complements
- (2) where prohibition, obligation take only infinitival complements
- (3) where prohibition takes both types, obligation only takes infinitival
- (4) where prohibition takes only nominalized complements, obligation only infinitival

All reject finite clauses, intriguingly.

Other types may emerge as the empirical landscape expands. In the talk, I will go into the theoretical side as well: (i) Works such as Carlson (1977), Chierchia (1984) argue for the same formal semantics for infinitives and gerunds – how do predicates logically choose between them then? (ii) In infusing questions in formal semantics with typological breadth, how can we unite diverging systems compositionally?

References

- Bresnan JW (1972) *Theory of complementation in English syntax*. PhD thesis, Massachusetts Institute of Technology.
- Carlson GN (1977) *Reference to kinds in English*. University of Massachusetts Amherst.
- Chierchia G (1984) *Topics in the syntax and semantics of infinitives and gerunds*. University of Massachusetts Amherst. Ph. D Dissertation.
- Grimshaw J (1979) Complement selection and the lexicon. *Linguistic Inquiry*. 10(2):279–326.
- Moulton K (2009) *Natural selection and the syntax of clausal complementation*. University of Massachusetts Amherst.



**15 *Challenges in Operationalizing Mood and Modality in Data Annotation Task* — Ojaswee Bhalla
Post-Doctoral Fellow (Linguistics), Department of Humanities and Social Sciences, Indian
Institute of Technology, New Delhi**

This paper looks at the grammatical categories of mood and modality and their implementation and operationalization in a data annotation task that was specific to Hindi, English and code-mixed Hinglish. The insights presented here are based on a research project that the author was a part of from 2022 to 2023 and that aimed at classification and categorization of online hate speech with the goal to improve predictive and moderation systems for them. A section of this enterprise required building a bridge from theoretical understanding of mood and modality and its application through their incorporation into a dataset annotation framework that was custom-built for this task. The aim of this paper is to outline the challenges faced at various steps vis-à-vis mood and modality in this novel research.

Broadly, current work on online hate speech takes texts posted by a user on some social media platform as the input to their annotation process to mark up the text for goal-relevant pieces of information. The first challenge was to decide upon the text length to be taken up for analysis and how to account for text spans that included more than one sentence in it. The second challenge was the inclusion of what mood and modality categories in the annotation framework that could account for both Hindi and English. Out of the set of grammatical features listed at the Universal Dependencies repository (<https://universaldependencies.org/u/feat/all.html>), selection of labels used for various moods and modalities mimicked the real-world, non-agreement situation amongst theoretical linguists regarding the linguistic phenomenon covered under each category label. To account for this, besides a ‘realis’ and an ‘irrealis’ category, a third label ‘neither’ was created to include constructs like questions. Since the annotation process is dependent on training of annotators of various backgrounds with the annotation guidelines, the third challenge came up in training non-linguists, some of which were not the native speakers of languages under enquiry, with identification of mood and modality instances in the target languages. The fourth challenge included the method to deal with code-mixed sentences as well as sarcastic texts, specifically those that included a mismatch between the text form and its illocutionary force. The observations from annotating a dataset of 2000 textual units highlight the use of epistemic and deontic modalities more than teleological or bouletic ones amongst texts scraped for hate speech as well as the use of declarative and imperatives over interrogatives in such data. The merit of this paper is that it presents to the larger academic the merits and challenges of pushing the boundaries of mood and modality as theoretical categories in solving an emerging real-world problem of hate speech.



**16 *Modal meaning in Kannada: beku and -ee as keys to understanding necessity* —Prarthanaa
Bharadwaj
Goethe University, Frankfurt, Germany**

The notion of modality has garnered considerable attention in semantics, particularly in the dimensions of modal flavour (epistemic vs. root modality; Kratzer 1977, 1991) and modal force (possibility vs. necessity; Rullmann et al. 2008). More recent research addresses the previously understudied dimension of modal strength, specifically the distinction between weak and strong readings (Vander Klok and Hohaus 2020; Weingartz and Hohaus 2024). In this talk, I examine the semantics of modal strength in Kannada, proposing that strong necessity in the language is expressed by the combination of a universal modal *beku* and an exhaustivity marker *-ee*.

Languages employ diverse strategies to denote modal strength distinctions (von Stechow and Iatridou, 2008). Certain languages (English, German) mark this distinction lexically, while others employ morphological means, such as counterfactual constructions (Greek, French) or specialized derivational

suffixes (Javanese). In some cases, this distinction remains unmarked (Afrikaans, Samoan). Kannada presents a novel phenomenon where strong necessity arises by exhaustifying over a necessity modal. This diverges from existing claims in the literature regarding modal meaning decomposition, where such readings typically arise from the exhaustification of possibility modals (Leffel 2012; Grubic and Mucha 2021).

Consider the sentence in example 1(a). The modal *beku* is ambiguous between a weak and strong reading with disambiguation relying on context. However, the presence of the marker *-ee* in 1(b) results in an unequivocally strong reading.

- (1) a. naale chaya shale-ge hoga-**beku**
tomorrow Chaya school-DAT go.INF-nec
‘Chaya should/must go to school tomorrow’
- b. naale chaya shale-ge hog-al-**ee-beku**
tomorrow Chaya school-DAT go-INF-EXH-nec
‘Chaya MUST go to school tomorrow’

Building on these examples, I analyse the patterns that emerge in different necessity contexts and argue that *beku* is a Kratzerian necessity modal that accommodates multiple ordering sources, enabling it to order the accessible worlds based on different criteria. Thus it can express weaker necessity (akin to “should”) in some contexts and stronger necessity (akin to “must”) in others. I then propose that the marker *-ee* is an overt EXH operator. The EXH operator takes two arguments, a proposition and a set of its alternatives, and returns the strengthened meaning of that proposition by excluding weaker alternatives (Fox, 2007; Spector 2016). This operator combines with the modal to narrow its focus to a singular, salient ordering source by excluding weaker ordering sources, yielding a maximally strong interpretation.

These insights not only advance our understanding of modality in Kannada but also contribute to the broader typological study of necessity modals.

References

- Fox, D. (2007). Free choice and the theory of scalar implicatures. *Linguistics and Philosophy*, 30, 249–290.
- Grubic, M., & Mucha, A. (2021). Decomposing Necessity — The Hausa exclusive particle *sai* as a window into the building blocks of modal meaning. *Proceedings of Sinn Und Bedeutung*, 25, 358–375.
- Kratzer, A. (1977). What “Must” and “Can” Must and Can Mean. *Linguistics and Philosophy*, 1(3), 337–355.
- Kratzer, A. (1991). Modality. In A. von Stechow & D. Wunderlich (Eds.), *Ein internationales Handbuch zeitgenössischer Forschung* (pp. 639–650). De Gruyter Mouton.
- Leffel, T. (2012). Modality and Future Reference in Masalit. In Michael R. Marlo (ed.), *Selected Proceedings of the 42nd Annual Conference on African Linguistics*, 221-230. Somerville, MA: Cascadilla Proceedings.
- Rullmann, H., Matthewson, L., & Davis, H. (2008). Modals as distributive indefinites. *Natural Language Semantics*, 16 (4), 317–357.
- Spector, B. (2016). Comparing exhaustivity operators. *Semantics and Pragmatics*. 9 (11).
- Vander Klok, J., & Hohaus, V. (2020). Weak necessity without weak possibility: The composition of modal strength distinctions in Javanese. *Semantics and Pragmatics*, 13 (12), 1–55.
- von Fintel, K., & Iatridou, S. (2008). How to Say Ought in Foreign: The Composition of Weak Necessity Modals. *Time and Modality*, 115–141.
- Weingartz, S., & Hohaus, V. (2024). Variable modal strength in Afrikaans and Samoan: Deriving strong necessity from weak necessity. *Proceedings of TripleA 10*, 60-74.



**17 The Distribution of Non-finite Complements of Deontic Modal Heads in Marathi — Shubham Suresh Bokade & Nirnimesh Bhattacharjee
Indira Gandhi National Tribal University, India & University of Minnesota, Twin Cities, USA.**

[The data under discussion are generated and verified by native speakers of Marathi, including one of the authors. Moreover, we shall be further collecting data using questionnaires specifically tailored for studies in the domain of deontic modality, developed by Dr. Diti Bhadra (FITT laboratory, University of Minnesota).]

In this paper, we study deontic necessity modals in Marathi, a Western Indo-Aryan language, and explore certain structural anomalies that become apparent from the observations. We discuss two aspects of deontic modal constructions in Marathi. First, the distribution of non-finite complements of deontic modal heads (Bhadra & Banerjee 2021, 2023). Secondly, the role of *-ts* as an enclitic discourse particle (Deo 2023) in colouring modal flavour.

It has been observed that some deontic modal heads only allow nominalized complements, as shown in (1a), while others allow infinitives (Dhongde & Wali 2009: 96), as shown in (1b). There are a few modals that accept both infinitives and other nominalized complements, as shown in (1c) and (1d). *dza-ve* is a non-finite form of the verb, which shows the obligation as in (1e), and its subject is the dative case marked. Examples from (1a) to (1e) show that there are three non-finite complements that have been selected by the different deontic modal heads. The aim of this paper is to study this distribution of non-finite complements of deontic modal heads along with the case system of the subject of the matrix clause. However, the modal predicates never allow finite complements, even in clefts. We observed that the subject is marked with a non-Nominative case. Infinitives mainly allow a Genitive marked subject, while nominalized complements allow Dative and Genitive markings. In (1a), the modal head *pahidze* (should) takes a nominalized complement, where the subject is marked with Dative; and in (1b) it is an infinitival complement in which the subject is genitive case-marked.

- (1) Nominalized and Infinitival Complements
- a. mə-la gʰəri dza-j-la pahidze
1SG.DAT home go-NMLZ-ACC should
'I should go home.'
 - b. mədze gʰəri dza-ne gardze-tʃe ahe
1SG.GEN home go-INF need-GEN be.PRS
'I need to go home.'
 - c. mə-la gʰəri dza-j-tʃi gərədz ahe
1SG.DAT home go-NMLZ-GEN need be.PRS
'I need to go home.'
 - d. mə-la gʰəri dza-ne gərədz ahe
1SG.DAT home go-INF need be.PRS
'I need to go home.'
 - e. tya-la ghari dza-ve lagnar
3SG.DAT home go-VE need.PRS
'He has to go home.'

Moreover, it is apparent that the nominalized forms of verbs are marked with Accusative and Genitive cases as in (1a) and (1c) respectively. We propose that *-j-* is a purposive marker that nominalizes the verb (for example *dza* 'go'), which allows for the case enclitics to appear at the end of the non-finite clause. The differences in case marking also raises a question about semantic requirements of the modal heads.

The discourse particle *-ts* in Marathi plays a significant role in altering the modal flavour. Marathi

employs a necessity-strengthening strategy where this discourse marker attaches to the non-finite form of the verb, keeping the form modal predicate (like *pahidze*) unchanged. It establishes a relation between the minimal pairs in terms of urgency. We can think of it as a distinction between ‘should’ and ‘must’. As shown in (1a) and (2a), the discourse marker *-ts* helps intensifying the sense of necessity. However, *-ts* appears to be compatible with certain modal heads like *pahidze* (should), but not with predicates like *gəradz* (need). In (2b), the discourse marker *-ts* attached to infinitival or the nominalized form for verb, yields an ungrammatical sentence with predicative adjective *gəradz* (need).

- (2) a. mə-la g^həri dza-j-la-ts pahidze
 1SG.DAT home go-NMLZ-ACC-EMPH should
 ‘I must go home.’
- b. *mə-la g^həri dza-j-tʃi-ts gəradz ahe
 1SG-DAT home go-NMLZ-GEN-EMPH need be.PRS
 Intended Meaning: ‘I have to go home.’

To sum up, we investigate into the distribution of the different non-finite modal complements. We further study the role of *-ts* as an intensifier (Bajaj 2016) that increases the degree of necessity for deontic modals.

Reference

- Bajaj, V. (2016). *Scaling up exclusive-hii* (Unpublished doctoral dissertation). Rutgers University-Graduate School-New Brunswick.
- Bhadra, D., & Banerjee, A. (2021). What gerund complements tell us about deontic necessity modals. In *Proceedings of sinn und bedeutung* (Vol. 25, pp. 130–147).
- Bhadra, D., & Banerjee, A. (2023). Modals of prohibition and obligation: semantics, complementation, typology. *Natural Language and Linguistic Theory* (Manuscript under review).
- Deo, A. (2023). Coordinated on the context: the many uses of marathi= ts. *Formal Approaches to South Asian Languages*.
- Dhongde, R. V., & Wali, K. (2009). *Marathi* (Vol. 13). John Benjamins Publishing.



18 Tense and Aspect Concepts of Manipuri in the Speech of an Autistic Child in Manipur — Ahanthem Romita Devi Assistant Professor, Department of Foreign Languages, Manipur University, India.

This study is based on the language development of an autistic Manipuri boy of 7 years of age, who also shows ADHD symptoms. He was assessed through ISSA, CONNERS Parents for Attention Deficit Hyperactivity Syndrome. In his assessment for autism, he had a score of 82, which was indicative of Mild Autism. For ADHD, his T score was more than 60, which explains his hyperactive behavior, peer relation and learning problems. The speech therapy that was administered according to the assessment given by the concerned doctor, was designed to teach the concept of time and related tense and aspect terms and markers both in English and Manipuri. His level of verbal communication in both the languages given above is at par with a three-years old child. During the therapy sessions, terms like *yesterday*, *today* and *tomorrow* were taught with relation to events that he has experienced and what awaits him the next day. English terms seemed easier for him to catch up to as compared to equivalent Manipuri terms namely, *ngarang*, *ngasi* and *28inear* respectively. The perfect tense marker of Manipuri *-re/le* was first found in his speeches. Through this course of teaching Manipuri Tense and aspect system, it was found that the aspectual part of action verbs was comparatively easier to understand for the child and thus tense marker, especially the future tense marker of Manipuri (*-kani/gani*) was absent in his speech.



**19 Habituality and the placement of Conditional Antecedents in Bangla — Ishani Guha
DST-CSRI National Postdoctoral Fellow, Indian Institute of Technology Delhi, India**

The Eastern Indo-Aryan languages Assamese, Bangla (Bengali) and Odia can use two kinds of adverbial clauses as the antecedent of conditional constructions: (a) the correlative clause, identified by conditional operator *ḍḍodi* ‘if’ and the verb bearing regular tense-aspect morphology as in (1), and (b) the participial clause indicated by the conditional participle *V-le* as in (2). In this paper I discuss a distributional distinction between these two kinds of conditional constructions in terms of their compatibility with the habitual aspect. Expressing habitual aspect in the consequent with the correlative antecedent is quite odd (3), and the participial antecedent is the vehicle for expressing habituality (4). This dispreference is not conditioned by the nature of the predicate (eventive or stative (5,6)) in the antecedent or the consequent. To explain the observed distributions, it is proposed that the participial antecedent can occur syntactically below the aspect head (Asp⁰) where the Habitual aspect appears (Φ_{Hab}), and hence it can be in the scope of the Habitual operator. However, the correlative antecedent is essentially intensional and cannot occur as low as the position below the aspect head, right above the VP. This positioning is further supported by the interaction of the durative adverbs (*gəto kək bəchor dhore* ‘for the last few years’, *kək ghəṅṭa (dhore)* ‘for a few hours’) with the conditional antecedents, the longer duration being required to occur above the antecedent, outside the scope of the habitual operator (7,8).

1. [ḍḍodi briʃti pɔɽe] (tahole) amra football khelbo
If rain fall.HAB.PRS.3 then we football play.FUT.1
‘If it rains, (then), we will play football.’
2. [briʃti pɔɽe] (*tahole) amra football khelbo
rain fall.LE then we football play.FUT.1
‘If it rains, (then), we will play football.’
3. ?? [ḍḍodi briʃti pɔɽe] amra football kheli
If rain fall.HAB.PRS.3 we football play.FUT.1
‘If it rains, (then), we play football.’
4. [briʃti pɔɽe] amra football kheli
rain fall.LE we football play.FUT.1
‘If it rains, (then), we play football.’
5. ?? [dipəkər ḍḍodi ʃorir kharap həj] bidifa rege ḍəj
Dipak.GEN if body bad be.LE Bidisha anger.CVB go.PRS.HAB.3
‘If Dipak falls ill, Bidisha becomes angry.’
6. [dipəkər ʃorir kharap hole] bidifa rege ḍəj
Dipak.GEN body bad be.LE Bidisha anger.CVB go.PRS.HAB.3
‘If Dipak falls ill, Bidisha becomes angry.’
7. gəto kək bəchor dhore [briʃti pɔɽe] amra football kheli
last few year hold.CVB rain fall.LE we football play.FUT.1
‘For the last few years, if it rains, then we play football.’
8. [briʃti pɔɽe] kək ghəṅṭa (dhore) amra football kheli
rain fall.LE few hour hold.CVB we football play.FUT.1
‘If it rains, then we play football for a few hours.’

References: Biswas (2013), Boneh and Doron (2008), Guha (2022), Masica (1991).



20 The expression of strong necessity in Suansu — Jessica K. Ivani & Dr. Taras Zakharko University of Zurich, Switzerland

This contribution explores the modal expression of necessity in Suansu, an endangered and underreported Trans-Himalayan language spoken in the Ukhrul district of Manipur, northeast India. Our study aims to contribute to the understanding of modality in the languages of the region, of which little is currently known. We focus on the Suansu particle *geraha*, which is encountered in contexts signaling strong (ex. 1) and weak (ex. 2) deontic necessity. Our goal is to explore the morphosyntactic and semantic properties of *geraha* and study how the interplay of modal forces and modality type (or conversational backgrounds, following Kratzer 1981) is reflected in the system of modal expressions in Suansu.

Modality is rooted in pragmatics, and the range of modal expressions can be challenging to capture in elicitation. We adopt a data-driven approach, where corpus occurrences of *geraha* are annotated with semantic, pragmatic, and other relevant contextual information. The data used in the study comes from heterogeneous sources, including a) an annotated corpus of about six hours of spontaneous and semi-spontaneous Suansu speech; b) an ad hoc developed questionnaire on modality and modality expressions (Vander Klok, 2022); c) modality storyboards (TFS Working Group 2012); and d) a Suansu corpus of movie subtitles. We describe the language-specific variation emerging from the data and compare it to the modal taxonomies proposed in the literature (e.g., van der Auwera and Plungian 1998, and a more recent work by Pyatkin et al. 2021). Finally, we propose future directions in the study of modality in the Trans-Himalayan languages of North-East India and general typology.

- (1) *no helmet thohn geraha*
2SG helmet wear MOD
'You must wear a helmet' (as per law regulations)
- (2) *Pune no ve gu, highway lapui la geraha*
Pune LOC go COND highway road take MOD
'To go to Pune, you should take the highway road'

References

- Kratzer, A. 1981. 'The notional category of modality'. In H. J. Eikmeyer & H. Rieser (eds), *New approaches in word semantics*, 38–74. Berlin: De Gruyter.
- Pyatkin, V., Sadde, S., Rubinstein, A., Portner, P., & Tsarfaty, R. 2021. The possible, the plausible, and the desirable: Event-based modality detection for language processing. In C. Zong, F. Xia, W., Li, & R. Navigli (eds), *Proceedings of the 59th annual meeting of the association for computational linguistics and the 11th international joint conference on natural language processing* (volume 1: Long papers), 953–965. Online: Association for Computational Linguistics.
- TFS Working Group. (2012). Feeding Fluffy. Retrieved from http://totemfieldstoryboards.org/stories/feeding_fluffy/
- van der Auwera, J., & Plungian, V. 1998. 'Modality's semantic map', *Linguistic Typology* 2(1): 79–124.
- Vander Klok J. 2022. 'Discourse contexts targeting modality in fieldwork: A revised modal questionnaire.' In J. Vander Klok, N. Ferreira Rech, & S. Guesser (eds), *Modality in underdescribed languages: Methods and insights*, 95-140. Berlin, Boston: De Gruyter Mouton.



21 Can I make myself do it? — Kanupriya Kale
Department of Linguistics, University of Colorado, Boulder, USA

Abstract: Passive constructions in Marathi have garnered interest for quite some time from theorists aligning with different traditions (Rosen and Wali 1989, Pandharipande 1981, Pardeshi 2016). This paper focuses on one specific construction that has been termed “potential passive” by Pardeshi and “capability passive” by Rosen and Wali. They provide the following examples for illustration:

- (1) ai-tʃ-ja dʊl-ja-t-l-e paŋi tʃ-ja-la
 mother-GEN-OBL eye-OBL-in-ADJ-N water.N he-OBL-DAT
 bəg^h-əv-l-a nahi
 see-PASSCAUS-PST-NSG NEG
 ‘He could not bear to see the tears in his mother’s eyes’
- (2) mini-kəɖun rəvi-la pəkəɖ-əv-lə ge-l-ə nahi
 Mini-by Ravi-DAT catch-CP-PTCP PASS-PAST-AGR not
 ‘Mini was unable/could not bring herself to catch Ravi’

Example 1 is provided by Pardeshi for “potential passive” or saky karmani according to Damle (1911). Example 2 is provided by Rosen and Wali for “capability passive”. They also acknowledge that other authors have identified this construction as potential mood. The point of contention here is the suffix [-əv] which is “homophonous” with the causative marker according to Pardeshi and is the same marker used for two functions according to Wali. Its usage in a causative construction looks like follows:

- (3) ai-ne drajər-ne kepɖe wa[-əv]-l-e
 mother-ERG dryer-by clothes.MPL dry-CAUS-PST-MPL
 “Mothers dried clothes in the dryer.”

In this paper I argue that it is the same morpheme that is used in both constructions: potential mood and causation. Instead of being homophones, this is a valency increasing device. For the causative construction, the presence of the morpheme creates the requirement for another semantic role that is overtly filled by a new argument. As for the potential mood, this additional thematic role is also fulfilled by the same argument. The role of agent and patient is simultaneously fulfilled by the same entity (making oneself do something). In this sense, the potential mood is an instantiation of a causative. The formalism can be achieved by creating a dummy as proposed by Rosen and Wali. Along with describing the role of the [-əv] morpheme, this paper will discuss the properties of the potential mood in Marathi, particularly with respect to its negative polarity tendencies.

References:

Damle, M.K. [1911] 1970. *šāstriy marāṭhi vyākraṇ* . (A scientific grammar of Marathi). Pune: Deshmukh & Company.

Pandharipande, R. V. (1981). *Syntax and semantics of the passive construction in selected South Asian languages*. University of Illinois at Urbana-Champaign.

Pardeshi, P. (2016). *A functional account of Marathi’s voice phenomena: passives and causatives in Marathi* (Vol. 7). Brill.

Rosen, C., & Wali, K. (1989). Twin passives, inversion and multistratality in Marathi. *Natural Language & Linguistic Theory*, 7(1), 1-50.



22 Cross-linguistic variation of Implicative inferences — Fahima Ayub Khan & Rajesh Kumar University of Gothenburg & IIT-Madras, Chennai, TN (India)

Implicative verbs is a category of presupposition triggers that entail the truth of their complement while carrying presuppositions regarding conditions on the context of utterance (Karttunen 1971). While this has been mostly studied in English, there is insufficient work on such inferences in other languages (Holvoet, Sprauinienė, & Laugalienė, 2019). Moreover, there is no consensus on the implicative behaviour of verbs like *remember* and *manage* even in English (Bagalini & Francez, 2016; White, 2019; Nadathur, 2023). In this study, we will examine implicative verbs and their inferential profile in Tamil, English, starting with the verbs *remember*, *manage*, *forget* and *fail* as case studies to determine whether their lexical semantics generate parallel inferences and contextual constraints (cf. Levinson & Annamalai, 1992). For example, we have observed that affirmative assertions involving *remember* in English generally commit the speaker to the truth of the complement. (1) entails (1a), whereas in Tamil (2) this is not the case, there is no implication of the truth of complement. On the other hand, (1) presupposes that the subject of the main clause was under some obligation or constraint to lock the door which also holds in Tamil:

- (1) She remembered to lock the door
(1a) She locked the door

- (2) Avalukku kadhav-ai poot-a ninavu-vandha-dhu
she-DAT door-ACC lock-INF memory-come-3.SG.PST.N
'She remembered to lock the door.'

Furthermore, the verbal morphology of Tamil allows for complex verbs that reflect aspect, speaker perspective, conditional and causal relations (Annamalai, Dhamotharan & Ramakrishnan, 2014) which potentially affects inferences derived from implicative verb constructions in Tamil. Considering the morphological complexity of Tamil, we hypothesise that the inferences generated by implicative verbs varies between English and Tamil.

In this study we use a judgement task to test the inferential profile of the verbs *remember*, *manage*, *forget* and *fail* in English and Tamil. We will recruit 50 native English speakers and 50 native Tamil speakers between the ages of 18 to 60 as participants. The native speakers of each language are presented with biclausal sentences involving the verb which is followed by a polar question (e.g., 'Did she lock the door?' in reference to example (1)) and they are asked to select an appropriate response with 'yes', 'maybe', and 'no' as the options. We use two non-implicative verbs (*hope* and *want*) in the filler trials. The collected responses and response times are statistically analyzed in relation to the verbs and the language group (English, Tamil). A preliminary analysis of existing data shows that native Tamil speakers do not infer the truth of the complement of the verb *remember* as in English. We explain this inferential variation in relation to morphosemantics of case, aspect, and modality in Tamil. The data will be analyzed further to investigate any variation in responses in relation to proficiency and bilingual experience. The resulting analysis will contribute to a cross-linguistic account of implicative entailment.

References

- Annamalai, E., Dhamotharan, A., and Ramakrishnan, A. (2014). Akarātiyiṅ putiya patippil taṅkālat tamiḷ ilakkāṇa viḷakkam (in Tamil). In Annamalai, E., Dhamotharan, A., and Ramakrishnan, A., editors, Crea-A: Dictionary of Contemporary Tamil, pages xxxi–xlvii. Crea-A Publishers, India.
- Bagalini, R., & Francez, I. (2016). The implications of managing. *Journal of Semantics*, 33(3), 541-560.
- Holvoet, A., Sprauinienė, B., & Laugalienė, A. (2019). Some implications for Ērika: Implicatives in Danish, Finnish and Lithuanian. *Shaping the rings of the Scandinavian fellowship. Festschrift in honour of Ērika Sausverde*, 215-240.

- Karttunen, L. (1971). Implicative verbs. *Language*, 340-358.
- Levinson, S. C., & Annamalai, E. (1992). Why presuppositions aren't conventional. In *Language and text: Studies in honour of Ashok R. Kelkar* (pp. 227-242). Kalinga Publications.
- Nadathur, P. (2023). Causal semantics for implicative verbs. *Journal of Semantics*, ffad009.
- White, A. S. (2019). Lexically triggered veridicality inferences. *Handbook of Pragmatics*, 22, 115-148.



23 Theory of Vaiyākaraṇās of the TAM properties for the Sanskrit verbal forms —Tapas Khanra & Malhar Kulkarni Indian Institute of Technology Bombay, India.

Sanskrit verbs provide detailed information regarding the Tense, Aspect, and Modality (TAM) and they change their forms based on rules corresponding to number and person [Briggs, 1985, p. 36]. While texts from the school of neo-grammarians, such as Kauṇḍabhaṭṭa's (17th century) Vaiyākaraṇa-bhūṣaṇasāra, etc., discuss six tenses and four moods in relation to the TAM, they do not illustrate the puruṣa (person) explicitly. The grammarian's theory states that the verbal suffix in a Sanskrit sentence expresses the meaning elements, such as kartṛ/karma, saṃkhyā, and kāla. For instance, the phrase 'gacchati Rāmaḥ' decodes the meaning as an act of 'going' taking place in the present tense in which the agent is qualified by third person and singularity, and which is not different from Rāma. Also, the phrase 'labhase' decodes the meaning as an act of 'attaining' taking place in the present tense in which the agent is qualified by second person and singularity. In both contexts, the 'person' is conveyed by the suffix (tiṅ). However, it is not considered to be part of the meaning. In a nutshell, the agent Rāma in the first example needs to be qualified by the third person, and in the second example, the agent needs to be qualified by the second person. Nevertheless, the neo-grammarians never explicitly mention 'person' as the meaning in the process of explication of the cognition of sentence meaning.

The present study involves the theoretical examination of Bhartṛhari's Vākyapadīya, which brings about a deeper understanding of puruṣa (person) as a meaning of tiṅ. We handle the sentences in accordance with the grammarian's theory of verbal cognition, which states that an action indicated by a verbal root is the primary qualificand or mukhya viśeṣya in the cognition of a sentence's meaning (vākyārtha). This approach is more cost-effective from a computational perspective [Kulkarni, 2021, p. 38].

The objective of this study is to demonstrate the appropriate categorization of ten lakaras in terms of TAM and to prove that the meaning of puruṣa is a component of TAM data as well. This work may have implications for annotating tags to understand better the relationships that give rise to verbal import and to structure a sentence's verbal cognition.

References

- Briggs, Rick. Knowledge representation in Sanskrit and artificial intelligence. *AI Magazine*, 6(1): 32, Mar. 1985. doi: 10.1609/aimag.v6i1.466. URL <https://ojs.aaai.org/aimagazine/index.php/aimagazine/article/view/466>.
- Chaitanya, V., R. Sangal & Akshar Bharati (Group). *Natural language processing: a paninian perspective*. Number v. 10 in Eastern economy edition. PHI Learning, 1996.
- Joshi, S. D., Kauṇḍa bhaṭṭa on the meaning of Sanskrit verbs (2): An English translation and annotation of the vaiyākaraṇabhūṣaṇasāra, chapter 1 with the introduction. 1993. URL <https://api.semanticscholar.org/CorpusID:60715864>.
- Kulkarni, A.. *Sanskrit Parsing: Based on the Theories of Śābdabodha*. D.K. Printworld, 2021. ISBN 9788124610787. URL <https://books.google.co.in/books?id=ErQgEAAAQBAJ>.
- Malhar Kulkarni, Anuja Ajotikar, Tanuja Ajotikar, Dipesh Katira, Chinmay Dharurkar, and Chaitali Dangarikar. 2010. Headedness and modification in nyāya morpho-syntactic analysis: Towards a

bracket-parsing model. In Girish Nath Jha, (ed.), *Sanskrit Computational Linguistics*, pages 106–123, Berlin & Heidelberg: Springer.



24 Tense, Aspect and Ergativity in Pahari — Zafeer Hussain Kiani **Assistant Professor, Department of English, University of AJ&K, Muzaffarabad**

Pahari is an Indo-Aryan Language, spoken in the Himachal Pardesh, the Indian administered part of Kashmir, the Pakistani administered part of Kashmir and Murree Hills (Khan, 2012). The focus of present study is the Pahari spoken in the Pakistani administered part of Kashmir. The study aims to analyze tense and aspect with respect to ergativity in Pahari. The data for this study was collected from the Pahari speakers of the district Rawlako of Pakistani administered Kashmir. Pahari shares numerous features with other South Asian languages, including a flexible word order that primarily follows the SOV pattern but also permits SVO word order in certain contexts. The syntactic function of a constituent is determined by its form, rather than its position in the structure. The study revealed that the past tense in Pahari is shown through the use of auxiliaries ‘*sa:*’, ‘*si:*’, ‘*se:*’, ‘*sjã:*’ in agreement with the subject: singular masculine, singular feminine, plural masculine and plural feminine respectively. The perfective aspect in Pahari is represented through the use of various forms of the root verb ‘*tʰoɽ*’ that agrees with the highest nominative in the sentence such as ‘*tʰoɽja*’ in agreement with ‘*kəm*’ (task) in the sentence ‘*os kəm mokaɽ tʰoɽja:*’ (s/he has completed the task). Thus, the perfective aspect in Pahari is conditioned by the syntactic formation of complex predicates. The study also revealed that the case marking on noun phrases in Pahari is a crucial factor in the derivation of clauses. The various case markings on NPs give rise to six distinct clause types like nominative-nominative clauses, nominative-accusative clauses, nominative-dative clauses, ergative-nominative clauses, ergative-accusative clauses, and ergative-dative clauses. The findings also show that unlike other Indo-Aryan languages, Pahari does not show overt ergative case marker while exhibiting perfective aspect through transitive verb. Instead, the ergative case marker is only employed when the subject is a third-person noun. In ergative-nominative clauses, pronouns appear in their bare form, without any overt marking.

References

Khan, A. Q. (2012). *Pahari Phonology: A Study of Segmental and Suprasegmental Features of Poonch Dialect* (Unpublished PhD Dissertation). University of Azad Jammu and Kashmir, Muzaffarabad.



25 Aspectual Semantics and Aspectual Classes in the Hindi-Urdu Compound Verb and Slavic Aspect — Rainer Kimmig **University of Tuebingen, Germany rainer.kimmig@uni-tuebingen.de**

The notion of aspect has been applied to the description / analysis of the verbal system of Hindi-Urdu (HU) in at times seemingly contradictory or mutually exclusive approaches. There are at least three different aspectual contrasts that are widely used in the discussion of the HU verb:

- (1) non-progressive vs progressive:
kartā hai — kar rahā hai
This contrast corresponds to a large extent to the one between simple and progressive (‘imperfective’) tenses in English (does – is doing), the progressive tenses being the marked partner of the opposition.

- (2) Non-anterior vs Anterior / resultative:

kartā hai — kiyā hai

This contrast corresponds to a large extent to the one between simple and anterior tenses in English (does – has done), the anterior tenses being the marked partner of the opposition.

- (3) Non-perfective vs Perfective in the strict sense of Slavic ‘vid’ (sometimes referred to as ‘lexical aspect’):

This contrast has been used to analyse the contrast between simple verb and ‘compound verb’ in HU (Pořízka, Nespital, Hook): *kiyā — kar diyā* (the difference between the two forms does not show up in English, but often corresponds to the contrast *делал – сделал* in Russian and other Slavic languages). The Compound Verb in Hindi / Urdu and the perfective verb in Slavic languages are the marked partner of the opposition. Other than ‘morphological aspect’, this contrast is present in the whole tense and mode system of the language, except for the progressive tenses.

The form *kiyā* is often analysed as a ‘morphological’ perfective (so as categorically in the programmatic text for this conference). It contrasts with the general / habitual past *kartā thā*, with the progressive past *kar rahā thā*, and with the anterior / resultative past *kiyā thā*. Other than the tense / aspect forms marked with the auxiliaries *hai, thā, hogā* it may as well be analysed as a non-marked, neutral form that is open to, but does not necessarily imply an aspectual, i.e., perfective reading; therefore, whatever its prehistory, its functional description as ‘simple past’ is at least defensible. Semantically, its perfectivity in the sense of (3) is problematic in view of its possible conative reading with verbs denoting ‘accomplishments’ (in Vendler’s sense) – a reading not possible in languages like Nepali where the aspectual character of the compound verb is much less developed than in HU (see Hook, Aspectogenesis).

Such an analysis is corroborated by translation studies (Russian to HU and vice versa) that show that in narrative texts the occurrences of a compound verb in HU are almost a subset of the occurrences of perfective verbs in Russian.

So far for a necessary preliminary. The main part of the presentation will provide a detailed discussion of the semantics of aspectual classes in HU and Russian, which shows a clear analogy between the HU compound verb and the slavic type aspectual verbal pairs. The discussion is based on a refined and extended application of Vendler’s classes to Russian aspect by Maslov, Bondarko, Glovinskaya and Zaliznyak & Šmelev, among others.

To give just one striking example from the class of delimitative verbs:

HU, simple verb <i>sonā</i> ‘sleep’, <i>ghūmnā</i> ‘walk, stroll’	Russian, imperfective verb: <i>спать</i> ‘sleep’, <i>гулять</i> ‘walk, stroll’
HU, compound verb (V2 <i>lenā</i> with intransitive V1) <i>so lenā</i> ‘take a nap’, <i>ghūm lenā</i> ‘have a (short) walk’	Russian, perfective verb <i>поспать</i> ‘take a nap’, <i>погулять</i> ‘have a (short) walk’



26 Formation of perfective verb stems in Kullui: diachrony and synchrony — Anastasia Krylova & Evgeniya Renkovskaya
Institute of Oriental Studies, Russian Academy of Sciences, krylova_anastasi@bk.ru & Institute of Linguistics, Russian Academy of Sciences, jennyrenk@gmail.com

[This work was carried out with the support of the Russian Science Foundation, project 24-78-10052 entitled: *Lexicological study of the Kullui language and the creation of a multimedia dictionary with an ethnocultural component.*]

Kullui is one of comparatively archaic Himachali idioms that has an extraordinary system of verbal inflection. There are four verbal classes in Kullui depending on the way the perfective stems are formed: secondary verbs with *i*-final stem, intransitive verbs with *f*-final stem, irregular verbs and all the rest. The purpose of our report, based on field data, is to collect cases of non-standard perfective and analyze the reasons for the appearance of such perfect for each type of case.

Intransitive *f*-verbs are a class of verbs that have retained the OIA past participle base ending with *-ṣṭa* in their perfective forms: *befṇa* ‘to sit down’ (< OIA *úpaviṣati* ‘sits down’) – perfective M.SG.DIR *beṭ^h-a* (< OIA *upaviṣṭa-*), *noṣṇa* ‘to go’ (< OIA *náśyati* ‘perishes’) – perfective M.SG.DIR *noṭ^h-a* (< OIA *naṣṭá-*).

In irregular verbs, perfective base also in some cases goes back to the OIA past participle of the same or another verb: *morna* ‘to die’ (< OIA *máratē* ‘will die’) – perfective M.SG.DIR *mū-a* (< OIA *mrtá*), *nikəṇa* ‘to come out’ (< OIA **niṣkalati* ‘comes out’) – perfective M.SG.DIR *nikt-a* (< OIA **niṣkasta* pp. of **niṣkasati* ‘goes out’).

Of particular interest is the verb *osṇa* ‘to descend’ (< **avakasati* ‘goes down’), for which, according to our data, the perfective is *os/-u* (< **avasalati* ‘jumps down’), but [Thakur 1975] gives *ot^h-a* (< **avakasta*, pp. from **avakasati*), so both forms are irregular.

For *-iṇa* verbs (which includes, in particular, passive verbs, like *heriṇa* ‘be visible, appear’), *i* as the final vowel of the stem is replaced by *-u-* both in the perfective (*her-u-a* ‘appeared’) and before any endings that begin from *i*, (e.g. *her-u-ija* ‘having appeared’, antecedent converb). Apparently, in these cases, a dissimilarity occurs before endings starting with *i*, in order to avoid the merging of two *i* vowels and the occurrence of homonymy of the forms of active and passive verbs. Most likely, *-iṇa* verbs were historically formed from a combination of an archaic passive form with *-i* and the verb *hoṇa* ‘to be’. The formant *-u* the is a rudiment of *hua*, the perfective form of *hoṇa*.

References

Thakur 1975. - मौलराम ठाकूर. पहाड़ी भाषा कुलुई के विशेष संदर्भ में. दिल्ली, 1975.

Maulu Ram Thakur, *Pahārī bhāṣā kuluī ke viśeṣ sandarbh mē (Pahārī language with applied description of Kullui)*. Delhi, 1975.



27 Against aspectogenesis: revisiting the diachrony of light verbs — Aaditya Kulkarni

Independent researcher, Maharashtra, India

In this paper, I argue against the view that the development of Indo-Aryan light verbs is a case of aspectogenesis- a sudden or gradual change that marks aspectual contrast. Hook (1991, 1993) considers light verbs to be an innovation of Indo-Aryan languages of the western Gangetic plane, evolved to mark ‘perfectivity’, i.e. completion of the event described by the main verb. However, Slade (2021) argues that unambiguous instances of light verbs are first attested not in the languages of western Gangetic plane, but in Sinhala and Marathi. Given that light verbs in Hindi-Urdu always mark the completion of the event as opposed to their Marathi counterparts, Hook (2001) considers the former to have a more developed

compound verb system than the latter, and classifies compound verb systems of different languages based on the properties of light verbs involved- which he correlates with the frequency of occurrence of light verbs. According to Hook, languages with light verbs not marking completion of an event are ‘underdeveloped’ and show ‘intermediate stages of process of aspectogenesis’, and are ‘slowly moving towards (*becoming*) a more Hindi-like system’. However, Marathi light verbs such as TAKE or WALK do not mark completion of an event despite Marathi light verbs crossing the 10% frequency mark in late 19th century (Kulkarni 2021)- something which Hook considers to be a threshold and an indication of an ‘advanced’ light verb system. That a light like TAKE, first attested in 13th century, shows no signs of marking ‘perfectivity’ still is inconsistent with an aspectogenesis account.

This, however, is consistent with Ozarkar’s (2014) observation about the split between complete and non-complete Marathi light verbs, where the former consistently mark the completion of the event whereas the latter don’t. A closer inspection of Marathi light verb shows that complete light verbs like GO, THROW, or SIT show many properties of what Hook considers to be of an ‘advanced compound verb system’, whereas non-complete light verbs like TAKE or GIVE don’t.

I take this as evidence against the assumption that all light verbs are moving towards a Hindi-like system and argue that Indo-Aryan light verbs don’t have a common goal- such as marking ‘perfectivity’- in sight, and hence, their development cannot be an instance of ‘aspectogenesis’. In doing so, I show that Hook’s classification of Indo-Aryan compound verb systems could be reinterpreted to show the distinction between complete and non-complete light verbs, including the cases where both sets of light verbs exist in the same language.

References

- Hook, P. E. 1991. The Emergence of Perfective Aspect in Indo-Aryan. In *Approaches to Grammaticalization*. B. Heine and E. Traugott, Eds. Amsterdam and Philadelphia: John Benjamins. Pp. 59-89.
- Hook, P. E. 1993. Aspectogenesis in Indo-Aryan. In *Complex Predicates in South Asian Languages*. M. K. Verma. New Delhi: Manohar. Pp. 97-113.
- Hook, P. E. 2001. Where do compound verbs come from? (and where are they going?). In *The Yearbook of South Asian Languages and Linguistics*. P. Bhaskararao and K. V. Subbarao. New Delhi: Sage. Pp. 101-130.
- Kulkarni, A. 2021. On the diachronic nature of Marathi light verbs. *University of Pennsylvania Working Papers in Linguistics*: Vol. 27: Iss. 1, Pp 113-117.
- Ozarkar, R. 2014. Structure of Marathi verbs. Unpublished doctoral dissertation at University of Mumbai.
- Slade, B. 2021. Development of verb-verb complexes in Indo-Aryan. In: *Verb-Verb Complexes in Asian Languages*. Edited by: T. Kageyama, P. E. Hook, and P. Pardeshi. Oxford University Press. Pp. 249-174.



28 Interaction of aspect and negation with respect to compound verb construction and serial verb construction in Marathi — Chandan Kumar & Prajwal Shelar Jawaharlal Nehru University, New Delhi, India

Hook (1974) states that a compound verb carries perfective aspect, therefore it is not likely to be negated. Although this stands true for some of the Indo-Aryan languages, Marathi behaves differently in this regard.

- (1a) samir-ni amba k^{ha}-un ʈakla
 sameer.3MS-ERG mango.3MS eat.V1-CP throw.V2.3MS.PST
 “Sameer ate the mango”
 “Sameer ate the mango and threw it.”

In affirmative sentences, like (1), light verb, V2, carries the aspect in one reading, where the construction is interpreted as a compound verb construction. In serial verb interpretation, it does not appear as a light verb rather it shows the predication of the event of throwing. In the second reading, V1 becomes non-finite, whereas V2 carries aspect for the second event only. Then, an obvious question arises: how do the same structure have two very different readings? It also violates the role of V2 which should carry TAM, which it does in first reading but in second reading- things change.

- (1b) samir-ni amba k^haun takla nahi
 sameer.3MS.ERG mango.3MS eat.V1.CP throw.V2.3MS.PST NEG
 “Sameer did not eat the mango”
 “Sameer did not throw the mango after eating it”

Compound verbs generally tend to repel negation as it shows completive action. Schmid (1989) argues that if there are restrictions on the appearance of aspectual forms under negation, completive forms will be restricted. In the above example, (1b) we can clearly see that this claim does not hold true when it comes to Marathi. To the best of our knowledge, in the current literature on Indo-Aryan languages, negation in compound verb is rarely attested. In Marathi compound verbs, light verb carries the aspect, tense and mood, in most of the cases it shows completion of the event. When negation appears with it, the semantics of the sentence changes.

There are two interesting points to be noted here. First, Marathi stands differently in comparison to other Indo-Aryan languages, here the same construction behaves as compound verb and serial verb construction, too. Second, the interaction of negation in these constructions yields two sets of readings. It negates the whole event and it negates a single event in the sentence. Negation can occur with compound verb in three positions, in two positions it negates different events in SVC or single event in CVC but in pre-verbal position it gives only one event reading and negation of the CVC.

The following questions, then, arise in Marathi: 1) How does the same structure give two readings of CVC and SVC? 2) How is negation compatible with the perfective aspect? 3) What are the selectional restrictions on verbs in selecting the negative particle? Do those criteria overlap with syntax and semantics? 4) Why and how is the change in the position of “nahi” altering the semantics of the CV construction and what are its impacts on aspect? 5) How can we account for the altered semantic readings in different neg position Marathi CV construction?

References

- Cinque, G. (2006). *Restructuring and Functional Heads the Cartography of Syntactic Structures*, Volume 4. New York: Oxford University Press.
 Clercq, D. K. 2013. *A Unified Syntax of Negation*. Ph.D. Dissertation, Universiteit Gent.
 Gibu, S. M. 2021. *Verbal Particles of Malayalam*. Ph.D. Dissertation, Jawaharlal Nehru University.
 Haegeman, L. 1995. *The Syntax of Negation*. New York: Cambridge University Press.
 Ozarkar, R. 2014. *Structure of Marathi Verbs*. Ph.D. Dissertation, University of Mumbai
 Schmid, M. A. (1980). *Co-Occurrence Restrictions in Negative, Interrogative, and Conditional Clauses: a Cross-Linguistic Study*, Ph.D. Dissertation, SUNY Buffalo



29 Tense, Mood and Aspect in Bishnuriya Manipuri — Nazrin B. Laskar Department of Linguistics, Aligarh Muslim University, India.

This paper discusses the Tense (T), Aspect (A) and Mood (M) system in Bishnupriya Manipuri, a contact language spoken at Hailakandi district in southern part of Assam in India. Bishnupriya Manipuri emerged

as a result of contact between varieties of Eastern Indo-Aryan (inflectional) and Tibeto-Burman (isolating) languages in Manipur, a state in the north-eastern part of India. However, the Bishnupriya Manipuris, along with many other tribes had fled from Manipur during the Burmese invasion (1819-1826) and settled in parts of southern Assam. In Hailakandi (Assam) where the present study was conducted, the Bishnupriya Manipuris co-exist with the Bengalis. Bengali, apart from being one of the primary languages that contributed to the formation of Bishnupriya Manipuri, is the dominant language of the region. Hence the Bishnupriya Manipuris living in Hailakandi are naturally bilinguals having facility in both Bishnupriya Manipuri and Bengali.

The Tense, Aspect and Mood categories in Bishnupriya Manipuri are expressed by verbs affixed with various inflectional suffixes. Bishnupriya Manipuri has one Tense represented by Past Tense category, one Aspect category realized by Imperfective Aspect and one Mood category denoted by Irrealis category. The Past Tense in Bishnupriya Manipuri is denoted by *l* or *s* or *sl* affixed to verb stem. In the Imperfective Aspectual category, the Habitual is expressed by inflectional affixes *l* or *s* or *r* or *Ø* and the Past Habitual by *l* or *s* or *r* or *t*. The Present Progressive situations in Bishnupriya Manipuri are conveyed by *r* or *s* or *te-s*, whereas the Past Progressives are designated by *r*. The Mood category represented by Irrealis is indicated by *t* or *ŋ* or *m* or *b*. Multiple forms perform the same function and on the other hand, a single affix performs multiple functions in Bishnupriya Manipuri. Bishnupriya Manipuri shares some of these affixes with Bengali but their grammar and semantics are different. As Bishnupriya Manipuri shows very complex TMA marking, in this paper we make an attempt to delineate the various linguistic as well as social factors that play a role in the construction of the TMA system of Bishnupriya Manipuri.



30 The Pragmatic Conditions Determining Telicity Sanjaya Kumar Lenka & Kalyanamalini Sahoo IIT-BHU, Varanasi-221005, INDIA & University of Artois, France.

This paper examines the pragmatic conditions that determine telicity, which refers to the inherent endpoint of an action or event expressed verbally. Telicity is not indicated by any specific syntactic operation or consistently linked to any clear morphological category such as case or quantifier (Filip, 2008). Instead, it is influenced by a range of linguistic and contextual factors. It means telicity is a semantic phenomenon which denotes a physical phenomenon of time of action.

The study identifies two types of semantic conditions that influence telicity: coded semantic conditions and intuitive semantic conditions. Coded semantic conditions refer to the different verb phrases that express telicity through their lexical forms. Intuitive semantic conditions, on the other hand, are the pragmatic conditions in which telicity is determined by the context and the speaker's intention.

The paper presents examples from Odia language to illustrate how telicity cannot always be determined by the lexical meaning of the verb alone. In certain constructions, such as compound verbs, the telicity of the event is determined by the addition of a second verb that quantifies or scales the action expressed by the first verb. E.g.

- (1) a. *kafi -Taa mun taaku de-l-i, kintu se pi-il-aa-ni*
 coffee-CL I him give-PAST-1SG but he drink-PAST-3SG-NEG
 'I gave him the coffee, but he didn't have it.'
 [= 'I offered the coffee to him, but he didn't have it.']
- b. **kafi-Taa mun taaku de-i-de-l-i, kintu se pi-il-aa-ni*
 coffee-CL I him give-CM-give PAST-1SG but he drink-PAST-3SG-NEG
 'I gave him the coffee, but he didn't have it.'
 [This means that the act of 'giving' is completed, but the receiver has not accepted it, hence, the sentence is wrong]

In example (1), where the addition of a secondary verb, such as *delaa* ‘gave’, transforms the meaning of the primary verb and measures the event it denotes. This suggests that the pragmatic context plays a crucial role in determining the telicity of the verbal construction (Sahoo, 2016). Furthermore, the study explores how the quantity of information or the scalar nature of the context can also influence the telicity of a verb.

The study proposes a hypothesis called "decomposing space" to explain how the pragmatic conditions coexist with the semantic conditions of linguistic form in determining telicity. This hypothesis suggests that the interplay between the lexical meaning of the verb and the contextual factors is essential in understanding the telicity of verbal constructions.

In conclusion, this study contributes to the understanding of how telicity is not solely a function of the inherent lexical properties of verbs, but is also shaped by the pragmatic conditions in which the language is used. It highlights the importance of considering contextual and intentional factors in the analysis of telicity, and the study of verbal semantics.

References

- Filip, Hana. 2008. ‘Events and Maximalization: The Case of Telicity and Perfectivity’, *Theoretical and Crosslinguistic Approaches to the Semantics of Aspect* (ed.) by Susan Rothstein. Vol. 110. John Benjamins.
- Sahoo, Kalyanamalini. 2016. ‘Multi-Verb Constructions - Parsing with a Deterministic Finite State Automaton’, In the *International Journal of Computational Linguistics Research*. Volume 7, Number 1, P25-36. DLIN.



31 *Tense and silent copulas in Vedic infinitives: A view from the Atharvaveda and the R̥gveda* — Davide Mocci University of Cagliari, Italy

According to *Aṣṭādhyāyī* 3.4.9, 3.3.10, *-tave/tavái*-infinitives convey future tense in Vedic subordinate purpose clauses:

- (1) dhánur ā tanomi [_{InfP} **brahmadvíṣe**^{PATIENT} (T°) śárave^{AGENT/INSTRUMENT} **hántavái**] (AVŚ 4.30.5)
‘I bend the bow for **the brahman-hater** (DAT) **to be smashed** by the arrow.’

tave/tavái-infinitives arguably also convey future tense in matrix sentences:

- (2) **brahmadvíṣaḥ**^{PATIENT} (T°) [_{InfP} śárave^{AGENT/INSTRUMENT} **hántavái**] (RV 10.182.3)
‘**The brahman-haters** (NOM) are **to be smashed** by the arrow.’

Capitalizing on the special properties of the subject of *-tave/tavái*-infinitives in AVŚ (*Atharvaveda-Śaunakīya*) and RV (*R̥gveda*), in this study we show that future tense is structurally represented by distinct strategies in subordinate and matrix infinitives.

There is lack of consensus as to whether *brahmadvíṣe* ‘brahman-hater.DAT’ is the subject of *hántavái* (1): Lühr (1997:161-162) takes *brahmadvíṣe* as an apposition of the infinitive, whereas Hettrich (1984:75-76) and Keydana (2013:122-143) consider it a *dativus 40ineariza* of the matrix sentence. This lack of consensus reflects the absence of a clear diagnostic to isolate the subject of *tave/tavái*-infinitives. We submit that intervention locality (Rizzi 1990; 2004) provides the relevant diagnostic.

When patients (*brahmadvíṣe*) and agents (*śárave* ‘arrow.DAT’) of *-tave/tavái*-infinitives co-occur, as in (1), it is systematically the PATIENT that is promoted to the function of subject of the matrix sentence, while the agent remains within the infinitival phrase (InfP): see (2). In the terms of intervention locality,

the patient is an A(rgumental)-intervener for the movement of the agent to the matrix sentence (Rizzi 1990:92-94). Thus, within the framework of intervention locality, where THE NOTION OF SUBJECT COINCIDES WITH THAT OF A-INTERVENER, *brahmadviṣe* is a bona fide subject of *hántavái*.

Now, in generative grammar, the subject takes on different case endings depending on the nature of the head (dubbed as GOVERNOR) with which it enters a local relation (Chomsky 2000:123-124; 2001:16-17). Thus, if the governor is a transitive verb, the subject is accusative-marked; if the governor is instead T° (=finite tense, expressing agreement in person and number with the subject), the subject is nominative-marked. This correctly accounts for (3), where the governor of the subject *īm* ‘him.ACC’ of *kártave* is a transitive V° (*uśmási* ‘wish.PRS.1PL’), as well as for (2), where the governor of the subject *brahmadviṣaḥ* ‘brahman-haters.NOM’ is – under the theory of Dynamic Antisymmetry and the Labeling Algorithm (Moro—Roberts 2024) – a SILENT T° head, corresponding to the copula *asti* ‘be’. By combining with *hántavái*, T° forms a complex predicate conveying future tense.

- (3) [InfP yád **īm** uśmási **kártave**] 41linea tát (RV 10.74.6)
‘he will do that which we wish **him** (ACC) **to do**’.

Crucially, had the governor of *brahmadviṣe* (1) been the selfsame T°-copula posited for (2), *brahmadviṣe*- should have been nominative-marked in (1) just like in (2), contrary to fact. Therefore, we conclude that, despite surface identities, the T° involved in subordinate *-tave/tavái*-infinitives (1) must be structurally distinct from the T° involved in matrix *-tave/tavái*-infinitives (2).

All in all, a structural analysis of tense in *-tave/tavái*-infinitives bears on important questions of Vedic grammar such as the existence of silent copulas in matrix vs. subordinate sentences.

References

- Chomsky, Noam. 2000. “Minimalist inquiries: the framework”. In R. Martin, D. Michaels, and J. Uriagereka, eds., *Step by step: Essays On Minimalist Syntax in Honor of Howard Lasnik*, pages 89-155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. “Derivation by phase”. In M. Kenstowicz, ed., *Ken Hale: A Life in Language*, pages 1-52. Cambridge, MA: MIT Press.
- Hettrich, Heinrich. 1984. “Zur historischen Syntax der nomina actionis im *Ṛgveda*: Der ‘doppelte Dativ’”. *Münchener Studien zur Sprachwissenschaft* 43: 55-106.
- Keydana, Götz. 2013. *Infinitive im Ṛgveda: Formen, Funktion, Diachronie*. Leiden—Boston: Brill.
- Lühr, Rosemarie. 2011. “Zur ‘Kasusattraktion’ in altindischen dativischen Infinitivkonstruktionen. Ein Fall von syntaktischer Analogie?”. In A. Lubotsky, ed., *Sound law and analogy: Papers in honor of Robert S.P. Beekes on the occasion of his 60th birthday*, pages 155-170. Amsterdam—Atlanta: Rodopi.
- Moro, Andrea and Ian Roberts. 2024. “The duality of syntax: Unstable structures, labelling and linearization”. *Natural Language & Linguistic Theory* 42: 609-631.
- Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, MA: MIT Press.
- Rizzi, Luigi. 2004. “Locality and Left Periphery”. In A. Belletti, ed., *Structures and Beyond: The Cartography of Syntactic Structures*, Vol. 3, pages 223-251. Oxford: Oxford University Press.



32 Habitual and Progressive Aspects in Hindko: A Comparative Study with Urdu —Muhammad Nawaz

Associate Professor, COMSATS University Islamabad. mnawazfazal@gmail.com

Abstract: This study aims to provide a detailed analysis and comparison of the tense and aspect systems of South Asian languages Urdu and Hindko spoken in Tanawal, Mansehra, Pakistan. This variant is known

as Tanoli Hindko. Urdu is the official language of the country. Hindko is the second most widely spoken language in the Khyber Pakhtunkhwa (KP) province. The analysis of the tense and aspect system of Tanoli Hindko has yet to be carried out systematically. This comparative study may offer researchers a more lucid understanding of Urdu and Hindko's tense and aspect systems. Hindko encompasses various dialects, including those spoken in Peshawar, Kohat, Haripur, Abbottabad, Mansehra, and Kashmir. Each of these dialectal varieties has distinct variations in both morphology and syntax. Urdu and Tanoli Hindko classify tense into three different categories: a) present tense, b) past tense, and c) future tense. Hindko allows the use of inflectional morphemes with the last word of a sentence, such as 'dā, dī, dē, dī', 'ā, ī, ē, ī', and 'lā, lī, lē, lī' respectively. On the other hand, Urdu permits the use of 'hā, hī, hē, hī' before copula, 'ā, ī, ē, ī', and 'gā, gī, gē, gī' at the final word of a sentence, respectively. The aspects of both languages can be divided into two parts: the imperfective and the perfective. The imperfect aspect and the perfect aspect are two categories in both languages. The imperfect aspect can be further divided into two types: (a) habitual and (b) progressive. The main findings of this study are as follows: (a) Hindko does not use a compound of imperfect participle and copula to express tense, but only the imperfect participle to indicate the habitual aspect; (b) the progressive aspect in Hindko is expressed by placing the adverb "legedā, legidī, legedē, legedī" (each dialect has a different adverb) before the predicate imperfect participle; (c) Hindko and Urdu exhibit the Oblique and Dative Accusative in the progressive aspect; (d) the imperfect form of Tanoli Hindko employs 'dā, dī, dē, dī' with the STEM, whereas Urdu utilizes 'hā, hī, hē, hī' in their root words; (e) both languages use Oblique with masculine-feminine plural in their perfective aspects; (f) Urdu allows the use of ergative case, but Hindko does not. The inflectional morphemes in each tense of all Hindko dialects produce various outcomes for the same attribute (likh-dā, likh-dān, likh-nā, likh-nā wān, etc.), regardless of number and gender, at the word level.

References

- Akpaca, S. M. (2024). An epistemological approach to the translation of tenses and aspects in English-French and French-English contexts. *International Journal of Linguistics and Translation Studies*, 5(2). <https://doi.org/10.36892/ijlts.v5i2.470>
- Awan, E. B. (2008). *Sarzamin-e-Hindko*. Peshawar: Gandhara Hindko Board.
- Bardovi-Harlig, K. (2023). Tense and aspect. In *The Encyclopedia of Applied Linguistics*. <https://doi.org/10.1002/9781405198431.wbeal1195.pub2>
- Binnick, R. I. (2012). *The Oxford Handbook of Tense and Aspect*. Oxford University Press.
- Bresnan, J. (2001). *Lexical-Functional Syntax*. Blackwell.
- Butt, M. J. (1993). *The structure of complex predicates in Urdu* (Doctoral dissertation, Stanford University). Retrieved from <https://searchworks.stanford.edu/view/4118006>
- Bybee, J. (2010). *Language, Usage and Cognition*. Cambridge University Press.
- Comrie, B. (1976). *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge University Press.
- Comrie, B. (1985). *Tense*. Cambridge University Press.
- Dahl, Ö. (1985). *Tense and Aspect Systems*. Basil Blackwell.
- Deo, A. (2006). *Tense and aspect in Indo-Aryan languages: Variation and diachrony* (Doctoral dissertation, Stanford University). Retrieved from <https://searchworks.stanford.edu/view/6685210>
- Dryer, M. S. (2007). Word order. In Timothy Shopen (ed.) *Language typology and syntactic description*, vol. III: Grammatical categories and the lexicon, chap. 2, 61–131 (2nd edn). Cambridge: Cambridge University Press.
- Frische, J. (2023). Tense and aspect. In C. A. Chapelle (Ed.), *The Encyclopedia of Applied Linguistics* (pp. 1-7). Wiley. <https://doi.org/10.1002/9781405198431.wbeal1195.pub2>
- Grierson, G. A. (1968). *Linguistic survey of India* (Vols. 1-11). Motilal Banarsidass.

- Kaplan, R. M., & Bresnan, J. (1982). Lexical-Functional Grammar: A formal system for grammatical representation. In J. Bresnan (Ed.), *The Mental Representation of Grammatical Relations* (pp. 173-281). MIT Press.
- Liu, Y. (2014). A comparative study of English tense and French tense. *Theory and Practice in Language Studies*, 4(11), 2314-2321. <https://doi.org/10.4304/tpls.4.11.2314-2321>
- Masica, C. P. (1991). *The Indo-Aryan Languages*. Cambridge: Cambridge University Press.
- Nawaz, M. (2014). *A Descriptive Study of Segmental and Selected Suprasegmental Features of Hindko Dialect Spoken in Tanawal, Hazara*. International Islamic University, (PhD Dissertation).
- Nishioka, M. (2022). Gendai hindī-go no mikanryōsō to shinkō hyōgen ni tsuite (The Expression of Imperfective and Progressive Aspects in Modern Hindi). In Gengo no ruiki-teki tokuchō taishō kenkyūkai (eds.), *Gengo no ruiki-teki tokuchō taishō kenkyūkai ronshū*. Osaka: Nicchū gengo bunka shuppansha.
- Rensch C. R., Calinda E. Hallberg & Clare F. O'leary. (1992). *Sociolinguistic survey of northern Pakistan: Hindko and Gojri*. (Vol. 3). Islamabad: National Institute of Pakistan Studies & Summer Institute of Linguistics.
- Robinson, N. (2024). The compromised tense-aspect distinction in Bantu languages: The case of Nyakyusa. *International Journal of Current Research in Humanities*, 27(1), 273-297. <https://doi.org/10.4314/ijcrh.v27i1.18>
- Shackle, C. (1980). Hindko in Kohat and Peshawar. *Bulletin of the school of oriental and African studies*, 43(3), 482-510.
- Trévisiol, G. (2013). *The Subjunctive Mood in French Grammar*. Sorbonne University Press.
- Weber, T. (2023). Tense, aspect, and mood in Germanic. *Oxford Research Encyclopedia of Linguistics*. <https://doi.org/10.1093/acrefore/9780199384655.013.983>



33 Language Change in Bhojpuri Progressive Expressions: A Comparative Study with Hindi-Urdu and Awadhi — Miki Nishioka
Associate Professor, University of Osaka, Japan

This paper describes Bhojpuri progressive expressions in comparison with Hindi-Urdu and Awadhi, based on Deo’s (2007) hypothesis on the historical transition of tense and aspect in Indo-Aryan languages. According to the hypothesis, there are three stages; an imperfect participle is used for both progressive and non-progressive (habitual, generic, etc.) aspects (see Comrie 1976 for these terms.); the imperfect participle (*Vim pf*) + auxiliary (AUX) or copula (COP), the latter of which carries tense (tns), is used specifically for the progressive aspect; the compound form *Vim pf* + AUX starts to be used for both progressive and non-progressive aspects.

Table 1 Deo’s Hypotehsis (2007: 162) of historical change in NIA

	progressive	non-progressive
Stage 1	<i>Vim pf</i>	
Stage 2	<i>Vim pf</i> + Aux tns	<i>Vim pf</i>
Stage 3	<i>Vim pf</i> + Aux tns	

In addition, I include another compound form, the innovative and periphrastic version (4) ‘stem + rahā + COP’, which is relatively new, hardly appearing in Hindi grammar books in 19th century. Hindi-Urdu uses (4) to express progressive meaning nowadays and uses (3) to express habitual or generic meanings. Awadhi is on Stage 3. As for Bhojpuri, although Verma (2007), Simh (2009), and Ādarś (2020) have not mentioned the form (4), equivalent structural form is occasionally observed in Bhojpuri as well.

Illustrative examples of Hindi progressive form (4) and their Bhojpuri translations are provided from a small parallel corpus I created myself based on some bilingual texts and animations.

The main findings of this study are: (a) A couple of examples with Hindi (4) are translated word for word, that is in the same structure in Bhojpuri too. It means Bhojpuri imported the structure to express progressive and has started to use it as well as the *Vimpf*+AUX. (b) The Bhojpuri compound form, ‘imperfective participle + AUX’ is also used in habitual aspect, as observed in Hindi-Urdu. Originally, the old present form ‘V[stem]-i(ii, e)-laa(le, lii, etc)’ is supposed to be used instead of ‘imperfective participle + AUX’. (c) In modern Bhojpuri, they tend not to use the old present form for habitual (generic) meaning anymore. This may be a similar phenomenon to what has already occurred in old and modern Awadhi [Saksena (1971)].

Table 2 Correspondence between imperfective forms and habitual/general and progressive aspects

	Hindi-Urdu	Awadhi	Bhojpuri
<i>Vimpf</i>	---	---	(Habitual)
<i>Vimpf</i> + Auxtns	Habitual/Generic	Habitual/Generic Progressive	Habitual/Generic Progressive
<i>Vstem</i> + rah- AC+AUX	Progressive	---	Progressive

Illustrative examples:

Alādīn aur jāduī cirāg [Hindi fairy tales & Bhojpuri fairy tales on YouTube; Awadhi translations by Mr. Vikas Pandey, a native Awadhi speaker]

- (1) H. bāp re, yah kyā **ho rahā hai?**
Oh God, this what be.STEM remain.PFV.m.sg COP.PRS.sg
Bh. bāp re, ī kā **ho rahal bā?**
Oh God, this what fear be attached.STEM remain.PFV COP.PRS
Aw. bāp re, ī kā **hot ho?**
Oh God, this what be.IPFV COP.PRS
‘Oh my God! What is happening?’ [Addressing his uncle]
- (2) H. mujhe dār **lag rahā hai.**
I.DAT fear be attached.STEM remain.PFV.m.sg COP.PRS.sg
Bh. hamrā ib dār **lag rahal bā.**
I.DAT now fear be attached.STEM remain.PFV.m.sg COP.PRS
Aw. hammae ab dār **lagat ho.**
I.DAT now fearbe attached.IPFV COP.PRS
‘I am scared. (lit.) Fear is being felt to me.’
- (3) H. ye phal kitne lazīz **lag rahe hai!**
this fruit how.m.pl delicious be attached.STEM remain.PFV.m.pl COP.PRS.sg
Bh. ī fal ketnā svādiṣṭ **lagat hā!**
this fruit how delicious be attached.IPFV COP.PRS
Aw. ī fal ketnā svādiṣṭ/aacha/meetha (**lagat**) **ho!**
this fruit how delicious (be attached.IPFV) COP.PRS
‘These fruits look so yummy (to me)!’

References

- Ādarś, Rājeś Cand. (2020). *Mānak himdī aur bhojpurī kā rūpvaigyānik adhyayan* (Kindle version). Ghaziabad, India: Antika Prakashan.
- Comrie, Bernard. (1976). *Aspects*. Cambridge: Cambridge University Press.

- Deo, Ashwini. (2007). Tense and Aspect in Indo-Aryan Languages: Variation and Diachrony. Stanford University, (Ph.D Dissertation). Available at <https://ojs.ub.uni-konstanz.de/jisal/dissertations/deo-diss.pdf>, accessed July 20, 2022.
- Masica, Colin P. (1991). The Indo-Aryan Languages. Cambridge: Cambridge University Press.
- Nishioka, Miki. (2022). Gendai hindī-go no mikanryōsō to shinkō hyōgen ni tsuite (The Expression of Imperfective and Progressive Aspects in Modern Hindi). In Gengo no ruikai-teki tokuchō taishō kenkyūkai (eds.), Gengo no ruikai-teki tokuchō taishō kenkyūkai ronshū. Osaka: Nicchū gengo bunka shuppansha.
- Saksena, Baburam. (1971). Evolution of Awadhi (A Branch of Hindi) (The 2nd edition). Varanasi: Motilal Banarsidass.
- Simh, Kanhaiyā, Tivārī, Anil Kumār. (2000). Madhyakālīn avadhī kā vikās. Vārāṇasī: Viśvavidyālay prakāśan.
- Simh, Śukhdev. (2009). Bhojpuriī aur hindī (The 1st edition). Vārāṇasī: Viśvavidyālay prakāśan.
- Tivārī, Udaynārāyaṇ. (1955). Hindī Bhāṣā kā Udgam aur Vikās (The 1st edition). Prāg: Bhāratīy Bhaṇḍar. Available at <https://archive.org/details/in.ernet.dli.2015.403228/page/n519/mode/2up>, accessed March 16, 2022.
- Varmā, Dhīrendra. (1933). Hindī bhāṣā kā itihās (The 1st edition). Prayāg: Hindustānī Ekeḍemī. Available at <https://archive.org/details/in.ernet.dli.2015.403683/page/n305/mode/2up>, accessed July 16, 2022.
- Verma, Manidra K. (2007). Bhojpuri. In Cardona, George, Jain, Dhanesh (eds.), The Indo-Aryan Languages, pp. 515-537, Routledge.



34 On the Distributive Partial Realization of Mandarin Accomplishments — Xiaolin Niu Department of Linguistics, University of Washington, USA

English telic expressions like “eat three apples” entail that all edible parts of the three apples are consumed. However, the literal Mandarin translation in (1) can be true even if the apples are not completely eaten, demonstrating the incompleteness effect in Mandarin accomplishments.

- (1) Wo chi-le san-ge pingguo, dan mei chi-wan.
I eat-PERF three-Cl apple but not eat-finish
‘I ate three apples but did not finish eating them.’

There are specific conditions governing such an interpretation. For (1) to be true, each apple must be at least partially eaten, as shown by the anomaly of several responses in (2).

- (2) A: Hai sheng duoshao?
Still remain much
‘How much remains?’
B: *San-ge / *Liang-ge/ *Yi-ge. /Ban-ge. /Mei-ge dou sheng-le dian.
*Three-Cl./ *Two-Cl / *One-Cl. /Half-Cl./Every-Cl all remain-PERF bit
‘*Three/*Two/*One/Half/Everyone has some remaining part.’

This incompleteness effect is also observed in other South and East Asian languages, such as Hindi (Singh, 1991). However, standard semantic proposals on verbal aspect (c.f., Dowty, 1979; Krifka, 1989, among many others) do not account for it, and no systematic explanation has been proposed.

This paper investigates these crosslinguistic differences and argues that the partial meaning of Mandarin *chi* ‘eat’ stems from verbal semantics rather than nominal structure, temporal expressions, or aspect markers. I propose a derivation using a partitive operator *Op* (Altshuler, 2014), assigning the semantics of *chi* ‘eat’ as “ $\lambda x.\lambda y. y \text{ eat}_{Op} x$ ”, which accounts for the partial meaning. The distributive reading results from Quantifier Raising of *san-ge pingguo* ‘three apples’, represented as “ $\lambda Q.\exists x[\text{Apple}(x) \wedge \forall y[[y \text{ is an atom of } x \text{ individuated by ‘Cl’} \wedge |x|=3*|y|] \rightarrow Q(y)]]$ ”, where the classifier *ge* ‘Cl’ segments entities into semantic atoms. This compositional analysis aligns with our intuitions about (1) and (2).

Additionally, I explore other Mandarin accomplishments, such as failed attempts (e.g., I opened the door but could not open it) and ‘backtrack’ interpretations (e.g., I opened the door, but it closed afterward). I also consider if events like “draw a unicorn” require the object to be at least recognizable (i.e., the drawing should be developed enough to be identified as a unicorn) for partial realization. I suggest that Mandarin partial realization represents minimal state change. These seeming exceptions can be explained from a possible world perspective with pragmatic considerations like common ground and predetermination. This approach maintains the proposed verbal semantics and provides a unified account for the creation, consumption, and change of state verbs in Mandarin.

References

- Altshuler, D. (2014). A typology of partitive aspectual operators. *Natural Language & Linguistic Theory*, 32, 735-775.
- Dowty, D. R. (1979). *Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and in Montague’s Ptq* (Vol. 7). Springer Science & Business Media.
- Krifka, M. (1989). Nominal reference, temporal constitution and quantification in event semantics. *Semantics and contextual expression*, 75(115), 9783110877335-005.
- Singh, M. (1991). The perfective paradox: Or how to eat your cake and have it too. In *Annual Meeting of the Berkeley Linguistics Society* (pp. 469-479).



35 Parya verb forms expressing unreality — Tatiana Oranskaia University of Hamburg, Germany

The paper investigates constructions with the meaning of unreality in the Parya language. This minor language exists in Tajikistan and Uzbekistan. It is genetically affiliated to the North-Western group of New Indo-Aryan and is the only Indo-Aryan language in Central (Middle) Asia. Parya had not been known to the scholarly world until the mid-1950s, when Iosif M. Oranskiy came across it. His book (Oranskiy 1977),¹ published posthumously, remains the main source on the language. The written system of Parya (based on the Cyrillic script) was created by researchers from SIL International with the assistance of a group of Parya speakers in the second decade of the 21st century (s. PAK 2016).² Apart from the data I collected during my last field trip to Tajikistan (in 2022; transcribed in IPA), the paper uses materials from both sources given above without changing the record (apart from glossing), but substituting the Cyrillic letters of the texts in PAK (2016) with their Latin correspondences.

The morpho-semantic analysis focuses on verb forms expressing unreal situations. Parya does not deviate from the general tendency to express unreality primarily through complex sentences; see (1) to (3). Unreal condition, as a rule located in the protasis part, determines the absolute impossibility of the whole situation relating it to the past, although the apodosis part, if separated from the subordinate clause, would convey potential modality; cf. (1), (2) vs. (3).

¹ Oranskiy, Iosif M. 1977. *Folklore and language of the Hissar Parya (Soviet Central Asia)*. Moscow: “Nauka”, Glavnaya redaktsiya vostochnoj literatury.

² *Parya amūko kāyī* (Stories of the Parya people). 2016. Dushanbe: „ER-graf“.

It is the verbal suffix *-t-* which determines the unreality in both positive and negative clauses. It is homophonous with the *-t-* of the rare verbal ending in IPFV forms denoting states; cf. (4). Interestingly, another function of the suffix *-t-* in Parya verbs is the second part in predicate negation; cf. (5), in which affirmative and negative present forms of the same verb *kar-* ‘do’ are counterposed. (6) provides further examples of affirmative present verb forms; they do not include the suffix *-t-*.

- (1) *vger mōro: bo:t pēsä: ho-t-o: mē ek koro molo₁+lqβ-ä:₂ tē-o*
 if my much money be-IRR.M I one horse buy₁₊₂-SJV be-PST
 ‘If I had plenty of money, I would have bought a horse.’
- (2) *vger tēm kēr=ta molo₁+na+le-t-o:₂ hā:zir naβokēr=ta*
 if you.PL house=ACC buy₁+ NEG +take-IPFV/IRR-2PL now new house=ACC
sq̄-ä: tē-ē
 build-SJV.2SG be-PRS.2SG
 ‘If you had not bought a house, now you would be building a new house.’
- (3) *hij ni, ki ya munde gal kar-a* (PAK 2016:3)
 anything not that this guy speaking do-SJV.3SG
 ‘Not a single time would this guy speak.’
- (4) *hat-a-se koro=ko raso ap su-tī* (PAK 2016:2)
 hand-in-his horse-GEN rein himself sleep-IPFV/STATE
 ‘He himself is sleeping with his horse’s rein in his hand.’
- (5) *rat=a čan lu kar-aj, garmi ni-kar-t-āj* (Oranskiy 1977:207)
 night=in moon light do-PRS.3SG warmth NEG-do-NEG-PRS.3SG
 ‘At night the moon gives light [but] does not heat [the Earth].’
- (6) *murke dek^h-aj, biye=ma yek anmi kalo-ī* (Oranskiy 1977:116)
 turning+around sees-PRS.3SG door=in one person standing-be.PRS
 ‘He turns around and sees that a man is standing in the door.’

The analysis leads to an assumption that in Parya unreal conditional expressions and negative true sentences have an originally common marker, which is rooted in the semantics of the IPFV aspect.



36 Patterns of tense markers in the link languages of South-Western Bengal, India —Dripta Piplai Assistant Professor, Humanities and Social Sciences, IIT Kharagpur, India

The linguistic landscape of South-Western part of West Bengal in India is complex, as it has several Austro-Asiatic languages along with several link languages in the Indo-Aryan skeleton. The link languages in the melting pot zone can be found in a bigger linguistic area, including Jharkhand and Odisha. The agreement patterns of the link languages follow the structures of dominant Indo-Aryan languages of the area: Bangla and Odia.

The paper argues that:

- a) link languages in certain remote location of South Western Bengal exhibit different patterns;
- b) Location of industrial/economic hubs in the melting pot zone direct the diffusion of certain morphosyntactic features like tense markers;
- c) The features of the link languages can be understood from the inflectional patterns which change according to the linguistic landscape.

The paper is based on the data collected from selected parts of Purulia, Bankura and Jhargram districts of West Bengal through several rounds of field work (2020-2023).

It has been found that the isolated hamlets of South Western Bengal have varieties with different inflectional tense markers. They preserved the characteristic features of tense markers, while speakers from the areas close to the economic hubs resisted the use of those features. The following data can show different patterns of the tense markers:

- (1) a č^hele-ʈa ɖu ɖin age bakso-ʈa k^hul-la
 boy-CLF two days back box-CLF open-PST-3P
 ‘The boy opened the box three days ago.’
- b ei meye-gulo b^haʈ k^hai-ʈ^h-e
 This girl-CLF-PL rice eat-PRS-3P
 ‘These girls are eating rice.’
- c hamarmane sɔbunək kailk-er ɖui-ʈa-r sɔmɔy b^haʈ k^hai-ʈ^hi-l-i
 We all people yesterday-GEN two-CLF-GEN time rice eat-AUX-PST-1P
 ‘All of us were eating rice at 2 p.m yesterday.’

The data in (1a)–(1c) are from link languages in different parts of the target area. I argue in the paper that the tense markers of the target area are the fused lects created as a result of long-term language contact. These forms are created as a result of levelling. They are used for inter-community communication in the target area, which are far from the economic hubs and a pattern can be predicted in their usage.

References:

- Aikhenvald, A. Y. 2003. Mechanisms of Change. in *Areal Diffusion : New Morphology and Language Contact. Journal of Linguistics*, 39(1), 1–29. doi:DOI:10.1017/S0022226702001937
- Auer, P. and Hakimov, N. 2021. From language mixing to fused lects: The process and its outcomes. *International Journal of Bilingualism*, 25(2), 361–368. <https://doi.org/10.1177/1367006920924943>
- Kerswill, P. (2003). Dialect Levelling and Geographical Diffusion in British English in Britain. In D. and Cheshire, J. (eds.). *Social Dialectology: In Honour of Peter Trudgill*. 223–243. Amsterdam: John Benjamins.



37 Tense, Aspect, and Modality (TAM) system in Pashto — Gohar Rahman Department of English, Islamia College, Peshawar, Pakistan <https://www.icp.edu.pk/>

This paper explores the Tense, Aspect, and Modality (TAM) system in Pashto, an Indo-Iranian language spoken in Afghanistan and Pakistan. Pashto, with its rich verbal morphology, offers a unique perspective on TAM elements, differing significantly from Indo-European languages such as English. This study provides an in-depth analysis of Pashto’s TAM system, focusing on the morphological and syntactic characteristics that define its expression of tense, aspect, and modality. By examining Pashto, we aim to highlight the distinctions between Pashto and other South Asian languages, contributing to a broader understanding of TAM in the region.

1. Tense in Pashto

Tense in Pashto is primarily indicated through morphological changes in the verb. Pashto verbs inflect for past, present, and future tenses. The present tense is marked by specific suffixes attached to the verb root, while the past tense often involves a combination of suffixes and vowel changes within the verb root.

1.1 Present Tense: The present tense in Pashto is marked by the suffixes -م (-am), -ې (-ee), -ي (-ai), and -و (-oo) for first, second, and third person singular and plural forms, respectively.

Examples:

- ليکم زه (za leekam) - I write
- ليکي ته (ta leeki) - You write
- ليکي هغه (hagha leeki) - He/She writes

1.2 Past Tense: The past tense in Pashto often involves a vowel change in the verb root combined with suffixes. The past tense forms are more irregular compared to the present tense.

Examples:

- ليکل زه (za likal) - I wrote
- ليکل ته (ta likal) - You wrote
- ليکلي هغه (hagha likalee) - He/She wrote

2. Aspect in Pashto

Aspect in Pashto is expressed through various verbal forms that indicate whether an action is completed, ongoing, habitual, or iterative. Pashto distinguishes between perfective and imperfective aspects, with specific markers for each.

2.1 Perfective Aspect: The perfective aspect in Pashto is typically marked by the use of auxiliary verbs and specific suffixes that indicate the completion of an action.

Examples:

- يم ليکلي زه (za likalee yam) - I have written
- يي ليکلي ته (ta likalee yee) - You have written
- دي ليکلي هغه (hagha likalee de) - He/She has written

2.2 Imperfective Aspect: The imperfective aspect, indicating ongoing or habitual actions, is marked by continuous forms often using auxiliary verbs in combination with the present tense form of the main verb.

Examples:

- ليکم زه (za leekam) - I am writing
- ليکي ته (ta leeki) - You are writing
- ليکي هغه (hagha leeki) - He/She is writing

3. Modality in Pashto

Modality in Pashto expresses necessity, possibility, permission, and obligation. Modal verbs and particles are used to convey these meanings.

3.1 Necessity and Obligation: Pashto uses modal verbs like "کول" (kol) to indicate necessity and obligation.

Examples:

- وليکم بايد زه (za baayad waleekam) - I must write
- وليکي بايد ته (ta baayad waleeki) - You must write

3.2 Possibility and Permission: Possibility and permission are expressed using modal particles and auxiliary verbs.

Examples:

- وليکم شي کيدای زه (za keydaay shee waleekam) - I can write
- وليکي شي کيدای ته (ta keydaay shee waleeki) - You can write

Analysis

Pashto's TAM system showcases several unique features. The tense system, while seemingly straightforward, involves a rich morphological structure that is not immediately apparent in other South Asian languages. The aspectual distinctions, particularly the perfective and imperfective aspects, provide insight into the language's handling of temporal nuances. Modal expressions in Pashto highlight the language's capacity to convey subtle degrees of necessity, possibility, and permission, often through the use of auxiliary verbs and particles.

Goals

The primary goal of this paper is to provide a comprehensive analysis of the TAM system in Pashto, highlighting its unique features and comparing it with other South Asian languages. By doing so, we aim to contribute to the broader understanding of TAM elements in the region. This study also seeks to demonstrate the richness of Pashto's verbal morphology and its implications for linguistic theory, particularly in the areas of tense, aspect, and modality.

Conclusion

The study of Tense, Aspect, and Modality in Pashto reveals a complex and rich system of verbal morphology that distinguishes it from other South Asian languages. By examining the morphological and syntactic characteristics of Pashto's TAM system, this paper contributes to a deeper understanding of the linguistic diversity in the region. Further research on the comparative aspects of TAM across South Asian languages can provide valuable insights into the historical and structural developments of these languages.

References

- Abazov, R. (2009). Historical Dictionary of Afghanistan. Scarecrow Press.
David, A. (2013). Syntax of Pashto Language. Language in India.
Khattak, M. U. (2009). Pashto Grammar. Pashto Academy, University of Peshawar.
Robson, B. (2009). The Pashto Language. National Institute of Pakistan Studies.



38 The Middling 'i' in the verbal forms of Sanskrit loan words borrowed into Tamil — S.

Ramaratnam

Vice Chancellor, Jagadguru Kripalu University, Odisha, India.

Tamil has borrowed a large number of Sanskrit words from very early times. The earliest book on Tamil Grammar (and also the first literary book available in Tamil), Tolkāppiyam 50inearizat Vaṭ(d)a sol (borrowed from Sanskrit, for example, kāraṇam meaning cause) as one of the four classes of words, the other three being, iyar sol (Tamil words in common usage, for example 'maram' meaning a tree), tiri sol (Tamil words used in literature, for example, 'tattai' meaning a parrot) and tisai sol (words present only in a particular dialect of Tamil, for example, 'acchan' meaning father, used only in the 'kuta naadu' area. It has become a common Malayalam word in Kerala).

Some aspects of tense in Sanskrit loan words borrowed into Tamil are discussed in the present paper.

- (i) The tense markers and the gender markers as applicable for the original Tamil roots are appended to the borrowed roots from Sanskrit also. Ex. vasikkiren, vasikkirān, vasikkirāL, vasittān, vasippān etc.
- (ii) Generally, Sanskrit roots that come under the class called 'set' exhibit a middling 'i' in some of the tenses like the II Future and in the Past Passive Participle (PPP) forms, but not in the Present tense. For example, the root paṭh to read, is transformed into paṭhiṣyati in II Future and paṭhita in the PPP,

are used (Damle, 1965). Finally, short O(bject)RCs with eventive verbs in the imperfective are unacceptable because of the null marked nature of the nominative case (Damle 1965).

Table 1: Restrictions on Short RC pattern in Marathi based on previous studies

Short RC with eventive	IMPV (nom-acc)	PFV (erg-abs)	Short RC with stative	IMPV (dat-nom)	PFV (dat-nom)
SRC	✓	✗	SRC	?	✗
ORC	✗	✓	ORC	✓	✓

However, despite these claims, Hook & Paradeshi (2017) found several attested examples of the “ungrammatical” patterns online, mostly used with intransitive verbs or transitives with inanimate objects. To examine acceptability of these structures, we designed an AJT looking at both eventive and stative transitive verbs in ORC and SRC conditions in both aspectual alignments. Data collection in Maharashtra of Marathi speaking adults (only adults who actively speak Marathi at home and identify as Marathi) is ongoing, but we anticipate over 60 participants. Our results to-date (n = 25) indicate that, compared to long RCs, which are generally rated highly (Figure 2) short RCs are rated relatively less acceptable in a majority conditions (Figure 1), despite their high frequency and the examples provided by Hook and Pardeshi (2017). Additionally, ORCs with stative verbs, which are supposed to be grammatical, are judged less acceptable in short RCs than long RCs only in the perfective.

Figure 1: Mean responses for Marathi Short RC pattern by Verb Type and Aspect

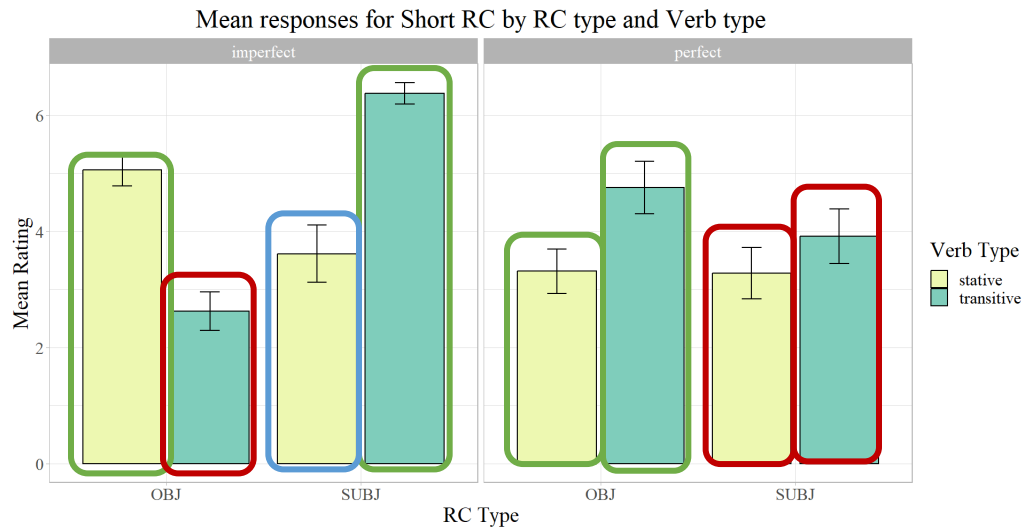
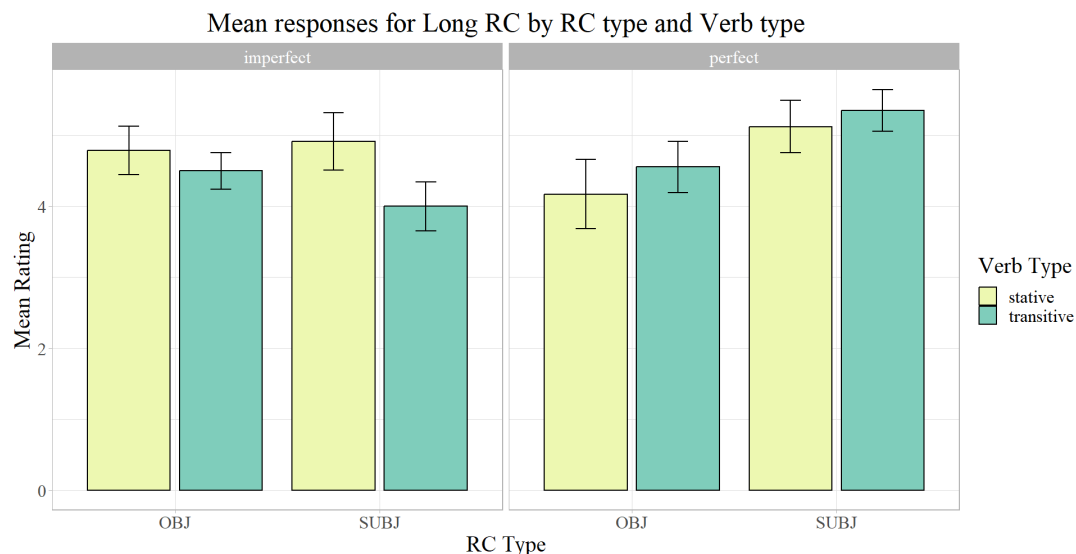


Figure 2: Mean responses for Marathi Long RC pattern by Verb Type and Aspect



References

- Damle, Moro Keshav. (1965). *Classical Marathi Grammar*, Delhi, India: Damodar Savalaram and Mandali.
- Deo, A. & Sharma, D. (2006). Typological variation in the ergative morphology of Indo-Aryan languages. *Linguistic Typology*, 10(3), 369-418.
- Dhongde, Ramesh & Wali, Kashi. 2009. *Marathi* [London Oriental and African Language Library 13]. Amsterdam: John Benjamins.
- Hook, P. & Pardeshi, P. (2017). Noun-modifying constructions in Marathi. *Noun-Modifying Clause Constructions in Languages of Eurasia : Rethinking Theoretical and Geographical Boundaries*, edited by Yoshiko Matsumoto, et al., John Benjamins Publishing Company.
- Polinsky, M. (2016). *Deconstructing ergativity : two types of ergative languages and their features*. Oxford University Press.



40 The General and Progressive Present in Hindi: Towards a Multilayered Theory of Aspect — Elmar Josef Renner Teaching Associate Professor, University of Copenhagen, Denmark

Latin School Grammar (LSG) and its regional (e.g. English) adaptations form the foundation of what Dixon referred to as ‘Basic Linguistic Theory (BLT)’. BLT encompasses a set of linguistic categories, some of which were directly derived from ancient Roman grammarians (e.g., tense, mood, and voice) and others incorporated from different traditions (e.g., ancient Greek aspect and the modern category of aktionsart). Descriptions of Hindi are predominantly based on the LSG/BLT framework. Although this framework offers valuable descriptive tools, it is inherently problematic due to its categories being based on the specific structural oppositions of the languages they originally described. Uncritical application of these categories risks imposing the formal and functional characteristics of languages like Latin or English onto Hindi.

This paper investigates the distinction between the general and progressive present in Hindi (e.g. *dekh^atā hūm* vs. *dekh^a rahā hūm*). It begins by elucidating the historical development of the applied categories. Subsequently, it employs methods from classic structuralism and functional linguistics to analyze the structural oppositions involved and to interpret them functionally in terms of underlying

cognitive-communicative procedures. The paper proposes a multilayered aspect category to accurately describe and explain one type of functions of the Hindi verbal constructions.

Literature

Ehlich, Konrad (2000) Funktional-pragmatische Kommunikationsanalyse – Ziele und Verfahren. In: Hoffmann, Ludger (ed.) Sprachwissenschaft. Ein Reader. Berlin, New York: de Gruyter, p.183-210.
Langacker, Ronald W. (2008) Cognitive Grammar. A Basic Introduction. Oxford. Oxford University Press.



41 Intensive verbal forms in the Atharvavedic recensions: between non-morphologically articulated and grammaticalized verbal acts — Paola M. Rossi University of Milan, Italy

This paper aims to give an overview of the intensive verbal category, focusing on its appearances in both the Atharvavedic recension and the Rigvedic attestations. This will help us find linguistic differences and test theories about how the OIA intensive category came to be. Reduplication, a well-known morphological marker of Vedic Sanskrit intensive verbal stems, possesses the full-grade of a root, unlike other reduplicated verbal stems (Kulikov 2005). Schaefer (1994) argues that the main semantic value of the intensive reduplicated stem is iterativity, while Praust (2000) emphasizes the unification of manifold actions into a single grammaticalized verbal act. Jamison's (1983) studies have significantly contributed to reconstructing the historical development of OIA intensive, despite the contentious question of whether this verbal form has its roots in the Indo-European linguistic heritage. Grieco (2023) also shows that in Vedic prose, the intensive category is recessive, as substituted by forms of verbal *āmreḍita* compounds. Against this backdrop, the Atharvavedic Sanskrit language could be considered a turning point: it retains some proto-Vedic traits, adopts a more 'popular' and colloquial character, and incorporates innovative elements. As for the popular character in intensive category, it is shown by the use of the stems of the root \sqrt{kr} (*karikr-*/*carikr-*) frequently combined with onomatopoeic nominal formations, referring to sounds made by animals and natural phenomena: e.g. *gaṅganam* \sqrt{kr} (PS 5.34.5), *ululā-* \sqrt{kr} (PS PS 2.55.5b; 5.17.2), *ghoṣān* \sqrt{kr} (PS 15.19.11; PS 7.13.13), *hiṅ-* \sqrt{kr} : (PS 16.32.8; ŚS 9.1.8). Intensive forms of roots conveying sounds of animals and natural phenomena (e.g., *kanikrad-* < \sqrt{krand} 'to make noise, to bellow, to neigh, to thunder'; *nonu-* / *nonav-* < \sqrt{nav} / *nū* 'to roar, shout, to bellow') are very common, as well: these mainly comply with the Rigvedic Sanskrit language. Finally, two features appear evidently to differ from the Rigvedic language: extensive use of the participle forms of intensive stems and derivative nouns from intensive stem (e.g. *rerihá-* 'licking all the time' [ŚS 8.6.6; PS 16.79.6], *abhirorudá* 'making s.one cry' [PS 3.28.5; ŚS 7.38.1]). This seems to point to a tendency towards nominalization.

References

Emeneau, M. B. 1969. "Onomatopoeics in the Indian linguistic area". In *Language* 45.2: 274-299.
Hoffmann, K. 1975. "'Wiederholende' Onomatopoeitika im Altindischen". In von J. Narten (herg.). *Aufsätze zur Indoiranistik*. Wiesbaden: Dr. Ludwig Reichert Verlag, I. 35-45.
Grieco, B. 2023. "On *āmreḍitas* in Sanskrit: evidence from Vedic Prose". In «Studi e Saggi Linguistici», 41.2, 57-87.
Hopkins, E. W. 1893. "Vedic Reduplication of Nouns and Adjectives". In: *The American Journal of Philology*, 14. 1: 1-40+138.
Jamison, S.W. 1983. "Two Problems in the Inflection of the Vedic Intensive". In «Münchener Studien zur Sprachwissenschaft», 42, 41-73.

- Klein, J. 2006. “Aspects of the Rhetorical Poetics of the Rigveda”. In : G.-J. Pinault-D. Petit (éds.). *La langue poétique Indo-Européenne. Actes du Colloque de travail de la Société des Etudes Indo-Européennes (Indogermanische Gesellschaft / Society for Indo-European Studies) Paris 22-24 octobre 2003*. Louven-Paris: Peeters, 195-213.
- Kulikov, L. 2005. “Reduplication in the Vedic verb: Indo-European inheritance, analogy, and iconicity”. In Hurch, B. (ed.), *Studies on Reduplication*, Berlin: Mouton de Gruyter, 431-454.
- Lubotsky, A. 1997. “Remarks on the Vedic Intensive”. In «Journal of the American Oriental Society», 117.3, 558-564.
- Praust, K. 2000. *Studien zum indogermanischen Verbum*. Ph. D. diss., Universität Münster.
- Schaefer, Ch. 1994. *Das Intensivum im Vedischen*. Göttingen: Vandenhoeck & Ruprecht.
- Wackernagel, J. 1957. *Altindische Grammatik II/1. Nominalsuffixe*, hrsg. von Albert Debrunner. Göttingen: Vandenhoeck und Ruprecht.



42 Transitive vs. intransitive agreement in Azamgarhi perfective constructions — Maaz Shaikh
Department of Linguistics, University of Alberta, Edmonton, AB Canada T6G 2E7

In Azamgarhi (Indo-Aryan > Eastern Hindi > Awadhic; Glottocode: azam1235), case marking follows a nominative-accusative alignment pattern, where the single argument of intransitive verbs (S) and the most agentive argument of transitive verbs (A) are marked the same (zero case-marking), while the most patientive argument of transitive verbs (P) is marked differently (the accusative-dative case clitic =*ka*), regardless of tense or aspect. However, in the perfective aspect, the verb agreement with an A argument differs from the verb agreement with an S argument, presenting a tripartite alignment pattern—P is never marked on the verbs—in terms of verb agreement. This contrasts with the split ergativity pattern seen in many Indo-Aryan languages such as Hindi-Urdu, where, in the perfective aspect, A is marked with an ergative case, and S and P are marked the same but differently from A (see Masica (1993), Deo & Sharma (2006), Subbarao (2012), Verbeke (2013)).

Based on naturalistic and elicited data from fieldwork, this study examines the asymmetry in agreement patterns in non-tensed and tensed perfective constructions in Azamgarhi. The examples in (1)³ illustrate that the case marking follows a nominative-accusative alignment pattern. Note that *adāmi* ‘man’ is treated the same in terms of case marking when it is the S argument of the intransitive verb *so:* ‘sleep’ in (1a) vs. when it is the A argument of transitive verb *joṭa* ‘gather’ in (1b). However, verb agreement with *so:* ‘sleep’ and *de:k^h* ‘see’ in (1a) show that S and A are marked differently on intransitive vs. transitive (in this instance non-tensed) perfective constructions.

- (1) a. *rat ke: ədəmi so:wa to: k^hab de:k^hes*
rat=k-e: ədəmi so:-a to: k^hab de:k^h-es
night(F)=GEN-OBL man(M) sleep-PFV.INTR.3MSG so dream(M) see-PFV.TR.3SG
ki, “aj həmre: g^hər b^həgwan əihē:.”
ki aj həm-r-e: g^hər b^həgwan a-w-ihē:
COMP today 1HON-GEN-OBL home(M) God(M) come-IAT-FUT.3PL
 ‘When the man slept at night, he dreamt, “God will come to my home today.”’
 (God as guest: 2)
- b. *cəʋt^he: dɪm ədəmi gə̃wāwālən ka jʋʧaes.*
cəʋt^h-e: dɪm ədəmi gə̃wā-wa=wāl-n=ka jʋʧ-a-es
fourth-OBL day man(M) village(M)-DEF1=ARLN-OBL.PL=DAT gather-VM-PFV.TR.3SG
 ‘The man gathered the villagers on the fourth day.’
 (Modified from “A couple: 10”)

In tensed perfective constructions, an auxiliary follows the verbal participle, adding a layer of tense marking to the construction (*həɪ-* in the present and *rəh-* in the past); however, S and A verb agreement still remains distinct. Table 1 illustrates the differences in perfective participles for intransitive (i) and transitive (t) agreement across three different tense-aspect combinations. In transitive verbs, the perfective participles do not inflect for gender, unlike intransitive verbs except for 1st person (cf. the non-tensed perfectives, *i*₁ with *t*₁). In present (tensed) perfectives (*i*₂, *t*₂), both the participle and the present auxiliary show Person, Number, and Gender (PNG) agreement for intransitive verbs (*i*₂), while the gender agreement is absent in the case of transitive verbs (*t*₂), except for 2f.sg. In the past (tensed) perfectives (*i*₃, *t*₃), both the participle and the auxiliary exhibit PNG agreement in *i*₃, while the participle forms in *t*₃ do not inflect for any agreement, and therefore the agreement can only be gleaned from the accompanying auxiliary.

Thus, this study finds that in the Azamgarhi perfective aspect, intransitive verb agreement differs from transitive verb agreement. This intransitive-transitive contrast is a determining factor for verb agreement in other Eastern Hindi languages (see Saksena (1971) for Awadhi and Grierson (1904) for Chhattisgarhi, Bagheli, Powari, and Awadhi). This research enhances our understanding of the attested alignment patterns in Azamgarhi and the determining factors behind them, showing that while case marking can follow a nominative-accusative alignment pattern, verb agreement may show a different (here, tripartite) pattern. More broadly, this work sheds light on the diversity and complexity of alignment patterns and their relationship to TAM systems in Azamgarhi and other Indo-Aryan languages.

Table 1: Different conjugations of the participle in different perfective forms of the verbs *bəɪtʰ* ‘sit’ and *de:kʰ* ‘see’

PNG	Perfective participle of itr. verb			Perfective participle of tr. verb		
	i ₁	i ₂	i ₃	t ₁	t ₂	t ₃
1m.sg.	<i>bəɪtʰũ</i>	<i>bəɪtʰe: hũ</i>	<i>bəɪtʰe: rəhũ</i>	<i>de:kʰeũ</i>	<i>de:kʰe: hũ</i>	<i>de:kʰe: rəhũ</i>
1f.sg.	<i>bəɪtʰũ</i>	<i>bəɪtʰi hũ</i>	<i>bəɪtʰi rəhũ</i>	<i>de:kʰeũ</i>	<i>de:kʰe: hũ</i>	<i>de:kʰe: rəhũ</i>
1pl.	<i>bəɪtʰē:</i>	<i>bəɪtʰē: hāĩ</i>	<i>bəɪtʰe: rəhē:</i>	<i>de:kʰē:</i>	<i>de:kʰē: hāĩ</i>	<i>de:kʰe: rəhē:</i>
2m.sg.	<i>bəɪtʰe:</i>	<i>bəɪtʰe: həɪ</i>	<i>bəɪtʰe: rəhe:</i>	<i>de:kʰe:</i>	<i>de:kʰe: həɪ</i>	<i>de:kʰe: rəhe:</i>
2f.sg.	<i>bəɪtʰɪs</i>	<i>bəɪtʰi həɪs</i>	<i>bəɪtʰi rəhɪs</i>	<i>de:kʰe:</i>	<i>de:kʰe: həɪs</i>	<i>de:kʰe: rəhɪs</i>
2m.pl.	<i>bəɪtʰe:</i>	<i>bəɪtʰe: ha</i>	<i>bəɪtʰe: rəhe:</i>	<i>de:kʰe:</i>	<i>de:kʰe: ha</i>	<i>de:kʰe: rəhe:</i>
2f.pl.	<i>bəɪtʰu</i>	<i>bəɪtʰi ha</i>	<i>bəɪtʰi rəhu</i>	<i>de:kʰe:</i>	<i>de:kʰe: ha</i>	<i>de:kʰe: rəhu</i>
3m.sg.	<i>bəɪtʰa</i>	<i>bəɪtʰa həɪ</i>	<i>bəɪtʰa rəha</i>	<i>de:kʰes</i>	<i>de:kʰes həɪ</i>	<i>de:kʰe: rəha</i>
3f.sg.	<i>bəɪtʰi</i>	<i>bəɪtʰi həɪ</i>	<i>bəɪtʰi rəhi</i>	<i>de:kʰes</i>	<i>de:kʰes həɪ</i>	<i>de:kʰe: rəhi</i>
3m.pl.	<i>bəɪtʰen</i>	<i>bəɪtʰen hāĩ</i>	<i>bəɪtʰe: rəhen</i>	<i>de:kʰen</i>	<i>de:kʰen hāĩ</i>	<i>de:kʰe: rəhen</i>
3f.pl.	<i>bəɪtʰɪn</i>	<i>bəɪtʰɪn hāĩ</i>	<i>bəɪtʰi rəhɪn</i>	<i>de:kʰen</i>	<i>de:kʰen hāĩ</i>	<i>de:kʰe: rəhɪn</i>

References

- Deo, Ashwini & Devyani Sharma. 2006. Typological variation in the ergative morphology of Indo-Aryan languages. *Linguistic Typology* 10(3). 369–418.
doi: 10.1515/LINGTY.2006.012.
- Abbreviations: 1 = first person, 3 = third person, ARLN = adjectival relational, COMP = complementizer, DAT = dative, DEF1 = definite1 (-wa), F = feminine, FUT = future, GEN = genitive, HON = honorific, IAT = irrealis active theme, INTR = intransitive, M = masculine, OBL = oblique, PFV = perfective, PL = plural, SG = singular, TR = transitive, VM = valency modifier.
- Grierson, George. 1904. *Indo-Aryan family mediate group. Specimens of the Eastern Hindi languages*. Vol. 6 (Linguistic Survey of India). Delhi: Low Price Publications.
- Masica, Colin P. 1993. *The Indo-Aryan languages*. Cambridge: Cambridge University Press.
- Saksena, Baburam. 1971. *Evolution of Awadhi*. Delhi: Motilal Banarsidass.
- Subbarao, Karumuri V. 2012. *South Asian languages: A syntactic typology*. Cambridge: Cambridge University Press.
- Verbeke, Saartje. 2013. *Alignment and ergativity in New Indo-Aryan languages* (Empirical Approaches to Language Typology 15). Berlin: Mouton De Gruyter.



**43 Verb Raising in Tamil: The argument from complex predicates in VP ellipsis constructions —
Rajamathangi Shanmugasundaram
Postdoctoral Researcher, Université de Lausanne, Switzerland**

It is quite common in many South Asian languages to make extensive use of monoclausal light verb constructions (Butt 1995), both V-V kind as well as the N-V kind. In most influential analyses, the light verb is analysed as merged in *v* (Adger, 2003; Butt and Ramchand, 2001; Bhatt, 2008; Mahajan, 2012) with the main verb at *V*.

Cross-linguistically, there is good evidence from VO languages that show that Verb stranding VP Ellipsis (VSVPE) is contingent on verb raising to *T* or to a projection outside the VP. The situation in OV languages is however not so straightforward as word order is not a reliable cue and *do*-support is not a universal phenomenon. Manetta (2019) argues that complex predicates provide a crucial diagnostic for syntactic verb movement in Hindi-Urdu. Just like with simplex verbs, Hindi-Urdu allows internal arguments to go missing in complex predicates as well, as shown by example (1a), constructions which she demonstrates must be analysed as VSVPE. Crucially, these constructions require that both the main verb and the light verb be stranded, as in (1b), with the alternative in which the light verb alone is stranded, as in (1c), being unacceptable.

- (1) Hindi (Manetta 2019:928)
- a. Kabir-ne us kitaab-ko pahli baar paR liiy-aa.
Kabir-erg this book-acc first time read take-pfv.m
'Kabir managed to read this book for the first time.'
 - b. Meena-ne bhi [e] paR liiy-aa.
Meena-erg also ep read take-pfv.m
'Meena also managed to read (this book for the first time).'
 - c. ?*Meena-ne bhi [e] liiy-aa.
Meena-erg also ep take-pfv.m
lit. 'Meena also took.'

Manetta argues that the unacceptability of light verb stranding alone shows that the main verb (merged at *V*) and the light verb (merged at *v*) must obligatorily move out of the *vP*. Following earlier proposals in the language, she claims that this movement is to a functional head *Asp* merged above *vP*. Following Manetta's (2019) lead in using the facts of Tamil complex predicates to argue that just like Hindi-Urdu, the data from these constructions provides us evidence that in Tamil too, the predicate must raise out of the *vP*.

Tamil allows for combinations for both Verb-Verb (V-V) and Noun-Verb (N-V) complex predicates in which the light verb is the final unit which carries all the functional information such as tense and phi-features. The verbal units that combine with the terminal verbal part can be either an adverbial or infinitival form. Complex predicates are used to express wide range of semantic information such as causative, passive, permissive, negation, aspectual information, mood and modality, including obligation vs. possibility (Sarveswaran and Butt, 2019).

Like Hindi-Urdu, Farsi and other languages, in Tamil also the internal arguments go missing in complex predicate construction. Unlike Farsi and just like Hindi-Urdu (cf. Manetta 2019), in Tamil, the complex predicate has to be stranded as a unit in these constructions. Example (2a) is a complex predicate which could serve as the antecedent clause for immediate elided utterance in (2b). While the deletion is allowed, the causative function of *vai* is no longer preserved when it is stranded without the main verb *eru*.

- (2) a. mi:ra avan-ai kaḍitam eṇu-da vai-tt-a:|.
Meera[3sgf.nom] 3sgm-acc letter-3sgn write-inf keep-pst-3sgf
'Meera made him write a letter.'

- b. na:n-um vai-tt-e:n [e].
 1sg-add keep-pst-1sg ep
 ‘(lit): I also kept.’
 ‘*I also made (him write a letter).’

Thus, NOCs with Tamil V-V complex predicates are just like those in Hindi-Urdu, requiring strict adjacency between the main and light verbs and stranding as a unit. Therefore, I will adopt Manetta’s analysis of an obligatory raising of the V-V complex predicate for Tamil, although the language does not present the same kind of support for an identification of raising to an Asp head as Hindi-Urdu and Russian Gribanova (2009, 2013) do. Tamil however differs from Hindi-Urdu in allowing light verbs to strand in N-V complex predicates across-the-board. As the example in (3a) shows, the light verb *sej-t-e:n* is stranded after ellipsis of the internal arguments and the nominal (*sama-yal*) part of N-V complex predicate.

- (3) a. me:ri madiya uṇavu-kku sama-yal sej-t-a:[na:n-um sej-t-e:n [e]
 Mary[3sgf.nom] afternoon food-dat [e]. cook-nomz do-pst.3sgf 1sg-add do-pst.1sg ep
 ‘Mary did cooking for lunch and I did too.’
 b. [e]: madiya-uṇavu-kku samay-al.
 ep: afternoon-food-dat cook-nomz
 ‘Cooking for lunch.’

I show that N-V complex predicate facts in Tamil show that a smaller chunk than the vP may undergo ellipsis in Tamil as well.

References

- Adger, D. (2003). *Core syntax: A minimalist approach*. Oxford University Press.
 Bhatt, R. (2008). Nv compounds and agreement. *EFLU, Hyderabad*. [Online] Available: people.umass.edu/bhatt/papers/eflu-aug18.pdf.
 Butt, M. and Ramchand, G. (2001). Complex aspectual structure in hindi/urdu. *M. Liakata, B. Jensen, & D. Maillat, Eds*, pages 1–30.
 Gribanova, V. (2009). Ellipsis and the syntax of verbs in Russian. In *NYU Linguistics Department Colloquium*.
 Gribanova, V. (2013). A new argument for verb-stranding verb phrase ellipsis. *Linguistic Inquiry*, 44(1):145–157.
 Mahajan, A. (2012). Ergatives, antipassives and the overt light v in Hindi. *Lingua*, 122(3):204– 214.
 Manetta, E. (2019). Verb-phrase ellipsis and complex predicates in Hindi-Urdu. *Natural Language & Linguistic Theory*, 37(3):915–953.
 Sarveswaran, K. and Butt, M. (2019). Computational challenges with Tamil complex predicates. In *Proceedings of the LFG19 conference, Australian National University. CSLI, Stanford*, pages 272–292.



44 Is egophoricity part of the TAM system? Evidence from Kathmandu Newā(r) — Shahani Singh Shrestha & Martina Wiltschko Universitat Pompeu Fabra & ICREA Research Professor, Universitat Pompeu Fabra, Spain

0. Goals. The goal of this talk is to explore the relation between the tense, aspect, modality system (TAM) and egophoricity (EGO) in Kathmandu Newā(r). This question is motivated in part by the morpho-syntactic pattern in the language which suggests a close-connection between TAM and EGO. The question raised then is: what is the syntactic status of each of these categories?

1. Egophoricity in Kathmandu Newā(r). EGO is a pervasive category of Newā(r) in that basic declarative and interrogative clauses have to be marked as either [+ego] or [-ego]. Roughly, [+ego] is used to mark direct access to the seat of knowledge (SoK) of the reported event (as in 1st person declarative (1a) and 2nd person interrogative (1b)), while [-ego] is used to mark no access to the SoK, as in 3rd person sentence (1c):

(1a) Ji ana wan-ā
 1.SG there.DEM go-PST.EGO
 ['I went there.'] (Informal, plain)

(1b) Cha ana wan-ā lā?
 2.SG there.DEM go-PST.EGO Q
 ['Did you go there?'] (Informal, plain)

(1c) Wa ana wan-a
 3.SG there.DEM go.PFV.NONEGO
 ['He went there.'] (Informal, plain) [Hale, 1980]

2. TAM and EGO are closely connected: morpho-syntactic evidence

As evident from the examples in (1), EGO marking is fused with tense/aspect marking in that the [+ego] suffix -ā also encodes past tense while the [-ego] suffix -a also encodes perfective aspect. Further evidence for the tight connection between EGO and TAM in Newā(r) stems from the fact that in the absence of EGO marking, tense marking is lost too. For example, EGO marking may be absent for reasons of manipulating the formality of the utterance. This is illustrated in (2), which is used to convey a patronizing tone.

(2) Cha ana wa-ṃ lā?
 2.SG there.DEM go.PST.EGOØ Q
 ['Did you go there?'] (informal, patronizing) [Singh Shrestha, 2023]

3. Towards an analysis. The morpho-syntactic connection between EGO and TAM could in principle be analyzed in various ways:

- i) T(ENSE) and EGO are two separate functional categories with a fused morphological realization in Kathmandu Newā(r)
- ii) T serves as the anchoring head with egophoric marking being realized as an additional feature
- iii) EGO serves as the anchoring head with tense marking being realized as an additional feature

We compare these analyses, consider data from more languages (Roque et. al, 2018) and suggest that hypothesis iii) is the most promising candidate. If so, this would add another language-specific category (EGO) to the inventory of possible anchoring categories identified in Wiltschko (2014).

References

- Hale, A. (1980). Person markers: Finite conjunct and disjunct verb forms in Newari. *Papers in Southeast Asian Linguistics*, 7, 95–106.
- Roque, S. L., Floyd, S., & Norclife, E., (Eds.). (2018). Egophoricity: An introduction. In *Egophoricity* (Vol. 118, Ser. Typological Studies in Language, pp. 1–78). essay, John Benjamins Publishing Company.

Singh Shrestha, S. (2023). *Egophoricity and Formality in Kathmandu Newār*. Talk presented at the 56th Annual Meeting of SLE, Athens

Wiltschko, M. (2014). *The Universal Structure of Categories Towards a Formal Typology*. CUP



45 In between time and modality: Challenges from Vedic Sanskrit — Althea Rosa Ludovica Sovani Faculty of Linguistics, Philology and Phonetics, University of Oxford, Oxford, UK

Although recent scholarship has made fundamental contributions to our understanding of the Vedic verbal system, especially as regards the interaction between tense and aspect (Dahl 2010; Jamison 2009, 2016, 2018; Lowe 2015; Hollenbaugh 2020), the relation between modality and future time expression in Vedic Sanskrit remains relatively understudied.

The present contribution discusses three of the many verbal formations that can express future time in Vedic: the *-syá*-formation (the future), the subjunctive and the desiderative. These have been the object of some recent works (Tichy 2006 for the subjunctive and, less in detail, the *-syá*-formation; Heenen 2006 for the desiderative), but various aspects concerning their semantics remain unclear. My study discusses the semantics of these formations and their relative distribution in the two earliest Vedic texts, the *Ṛgveda* and *Atharvaveda*.

Of the three, the *-syá*-formation has been the least studied. Concerning its semantics, I suggest that Tichy's (2006) arguments, to date the most extensive treatment, need rethinking. Tichy argues that the function of the *-syá*-formation (which she takes to be, in her terms, a 'Präparativ' type of semantics) does not significantly change at different stages of early Vedic. By looking at the productivity of the *-syá*-formation in the *Ṛgveda* and *Atharvaveda*, and at its distribution, I demonstrate that the semantics of *-syá* does change already in the earliest period of Vedic, progressing from intention in the *Ṛgveda* to prediction in the *Atharvaveda*.

The subjunctive and the desiderative have been studied more extensively, but some questions about their functions, as well as their relation to the *-syá*-formation, are still unresolved. The Vedic subjunctive is traditionally interpreted as coming close to a simple future tense, with more or less stressed modal undertones (such as expressing *expected* future, as per Tichy 2006), but it is still debated whether it can function as a mood proper. Jamison and Brereton (2014) usually translate it as a future in all contexts and recent works (Bozzone 2012; Dahl 2013) even reconstruct the subjunctive as a present-future formation in the protolanguage.

Although subjunctives in main clauses effectively function as future tenses, I argue that this is not equally true of all occurrences of the subjunctive in subordinate clauses. My evidence rests on the discussion of the occasional, albeit uncommon, instances of *-syá*-subjunctives and desiderative subjunctives. These problematic cases have never been systematically studied before, although they pose a challenge to the functional analysis of the three formations discussed here. Is a *-syá*-subjunctive, for instance, primarily a subjunctive with an additional intentional sense or is it primarily a *-syá*-formation with an added notion of expectation? By conducting a close analysis of these forms, I argue that a future interpretation would be inadequate and that, contrary to standard accounts, the Vedic subjunctive could function as a proper mood in subordinate clauses.

Drawing from the above results, I finally suggest a new method of discussing modality and tense expression in Vedic that does not rest on the traditional distinction between mood and tense as two discrete notions.

References

- Bozzone, C. (2012), ‘The PIE subjunctive: function and development’. In H. C. Melchert (ed.), *The Indo-European Verb: Proceedings of the Conference of the Society for Indo-European Studies, Los Angeles 13–15 September 2010*: 7–18.
- Dahl, E. (2010), *Time, tense and aspect in early Vedic grammar: Exploring inflectional semantics in the Rigveda*. Brill.
- Dahl, E. (2013), ‘The Indo-European subjunctive and its origin as a present’. In *The Journal of Indo-European Studies*: 392–430.
- Heenen, F. (2006), *Le désidératif en védique*. Brill.
- Hollenbaugh, I. (2020), ‘Augmented reality: A diachronic pragmatic approach to the development of the IE injunctive and augment’. Paper presented at the 39th Annual East Coast Indo-European Conference.
- Jamison, S. W. (2009), ‘Where are all the optatives? Modal patterns in Vedic’. In *East and West: Papers in Indo-European Studies* (Proceedings of the Kyoto Indo-European Workshop, Kyoto University, Sept. 2007).
- Jamison, S. W. (2016), ‘The Vedic perfect subjunctive and the value of modal forms to tense/aspect stems’. In *Miscellanea Indogermanica: Festschrift für José Luis García Ramón zum 65. Geburtstag*: 313–24.
- Jamison, S. W. (2018), ‘The Vedic perfect imperative and the status of modal forms to tense-aspect stems’. In *Farnah: Indo-Iranian and Indo-European Studies in Honor of Sasha Lubotsky*: 55–63.
- Jamison, S. W., and J. P. Brereton (eds.) (2014), *The Rigveda: the earliest religious poetry of India*. Vol. 1. OUP.
- Lowe, J. J. (2015), *Participles in Rigvedic Sanskrit: The syntax and semantics of adjectival verb forms*. OUP.
- Tichy, E. (2006), *Der Konjunktiv und seine Nachbarkategorien: Studien zum indogermanischen Verbum, ausgehend von der älteren vedischen Prosa*. Bremen: Hempen Verlag.



46 Deontic Modality Through the Verb ‘to give’: Evidence from Thai — Upsorn Tawilapakul Language Institute, Thammasat University, Bangkok, Thailand

This paper investigates the operation of the verb ‘to give’ in Thai in resultatives. *Hây* or ‘to give’ originally serves as a ditransitive verb and appears as the head of an adverbial normally added to a resultative as exemplified in the sentences in (1) and (2), respectively. Interestingly, gradable result states are allowed in the resultative as shown in (3) and (4):

- (1) danay **hây** ɲəən (kèɛ) chǎn
Danai give money (for/to) I
‘Danai gave me some money.’
- (2) danay yâaŋ núa **hây** sùk
Danai grill beef give cooked
‘Danai grills some beef and makes it (completely) cooked.’
- (3) Danai yâaŋ núa **hây** sùk nítnòy
Danai grill beef give cooked slight
‘Danai grills some beef and makes it slightly cooked (rare).’
- (4) Danai yâaŋ núa **hây** sùk paanklaaŋ
Danai grill beef give cooked medium
‘Danai grills some beef and makes it medium cooked (medium rare).’

While some previous studies on Thai propose that *hây*, when used in a resultative, is part of a serial verb construction and attains a purposive function, signalling that the result state is the purpose of the action

(Rangkupan 2007; Thepkanjana and Uehara 2008), this paper, based on the observations from (3) and (4), denies this claim. When *hây* is added to a resultative, it does not indicate the purpose of the action. Rather, it carries a deontic implication which suggests that the action and the result state are believed by the speaker to satisfy a particular probabilistic conditional and is thus obligatory. Following Cariani (2016), the elevated ordering source of (3) is represented by the probabilistic deontic conditional as shown in (5). It prompts all possible alternatives that would potentially correspond to the conditional. Accordingly, the ordering sources of (3) is the probabilistic deontic conditionals provided in (6) and (7), respectively.

- (5) Given α 's circumstances, goals and information, α ought to φ . (p. 11)
 (6) If it is likely that slightly cooked beef will (for example) satisfy Malee, Danai should grill the beef and make it slightly cooked.
 (7) If it is likely that slightly cooked beef will (for example) satisfy Malee, Danai must grill the beef and make it slightly cooked.

In the case of a resultative with *hây*, the conditional suggests that achieving the result state at the termination of the action is an obligation. The probabilistic deontic conditionals also apply to (4). Cariani's elevated ordering source prompts the actions and result states that would potentially correspond to the probabilistic antecedent. *Hây*'s compatibility with gradable result states suggests that it does not denote that the states are the purposes of the actions. Gradability indicates that result states do not necessarily represent complete changes of state as seen from the different degrees of doneness of beef which commonly serve varying preferences of people. Thus, *hây* denotes the obligatoriness of the achievement of the result states. The findings reveal another means to indicate deontic modality while at the same time contributing to the investigation on the verb 'to give' in general.

References

- Cariani, F. (2016). Deontic modals and probabilities: One theory to rule them all?. *Deontic modality*, 11-46.
 Rangkupan, S. (2007). The syntax and semantics of GIVE-complex constructions in Thai. *Language and Linguistics*, 8(1), 193-237.
 Thepkanjana, K., & Uehara, S. (2008). The verb of giving in Thai and Mandarin Chinese as a case of polysemy: A comparative study. *Language Sciences*, 30(6), 621-651.



47 Semantics of Aspect in Mandarin Chinese — Sebastian Wielosz Department of Japanology and Sinology, Institute of Oriental Studies, Faculty of Philology, Jagiellonian University, Kraków, Poland

According to the definitions of Comrie (1976: 3, 7), Smith (1991: xii, xv) and Boogaart and Janssen (2007: 803), created for the purpose of describing languages other than MC, non-deictic aspect is the internal temporal structure of an event and, together with deictic time, builds the temporal system of the language. Meanwhile aspect plays a leading role in this system due to the fact, that MC is a tenseless language. The category of aspect in MC, as in Indo-European languages, can be further divided into two subgroups: grammatical and lexical. This division in MC is clearly evident from the fact that there are no aspectual markers in the morphology of the verb. They are introduced externally, by means of grammemes. In addition, the semantic structure of the predicative is also important, especially the aspectual bundles of semes inscribed in their semantic structure represented by the semanteme. These fall within the scope of the study of lexical aspect. Referring to the studies of Kokorniak (2018: 21) and Karolak (2008: 10), I assumed that in MC lexical and grammatical units form a specific network of aspectual relations, primarily semantic.

The main purpose of my study was to establish the aspectual value of MC predicate, taking into consideration the semantic value of aspectual grammemes and semantemes, as well as their coexistence in the predicate. Aspectual seme nodes (Seretny 1998), that is, semes common to words with similar semantic properties, were also important in this approach, which at the same time are differential semes for words with different aspectual value. Vendler's (1957) taxonomy was used as a starting point. In its expanded scope, the classification I propose includes not only verbs, but more broadly, predicatives, i.e., words that have the potential to act as sentence predicate. Therefore, the parameters and semantic subgroups specific to MC, identified by other researchers, are added to it, complementing the proposal created for English by Vendler (Smith (1991) or Croft (2012)). For the analysis carried out, the assumption presented in the works of Karolak (1996, 2005) was made that the category of aspect can be represented by simple concepts that form specific bundles that constitute compound concepts. I assumed that aspectual simple markers correspond to the bundles of semes and aspectual grammemes contained in the semantics; their combinations, in turn, determine the final aspectual value of the compound predicate in the sentence structure. The research conducted consisted of establishing the semantics of aspectual grammemes and syntactic analysis of semantemes in examples of sentences excerpted from the BCC corpus published by Beijing Language and Culture University. For this purpose, I used the assumptions of Karolak (1996), Huang and Ahrens (2000) and Malchukov (2011) regarding semantic relations within the predicate. According to them, specific terms, due to possible redundancy, do not co-occur with aspectual terms of the same value. The analysis ultimately revealed specific relationships related to the connectivity of simple and complex semantemes, and grammemes, which I am willing to present.

References

- Boogaart R., Janssen T. (2007), *Tense and Aspect*, [w:] Geeraerts D., Cuyckens H. (red.), *The Oxford Handbook of Cognitive Linguistics*, Oksford.
- Comrie B. (1976), *Aspect. An introduction to the study of verbal aspect and related problems*, Cambridge.
- Croft W. (2012), *Verbs. Aspect and Causal Structure*, New York.
- Huang C., Ahrens K. (2000), *The Module-Attribute Representation of Verbal Semantics*, [w:] *Proceedings of the 14th Pacific Asia Conference on Language, Information and Computation*, Tokio, s. 109–120.
- Karolak S. (1996), *O semantyce aspektu (w dwudziestą rocznicę publikacji rozprawy F. Antinucciiego i L. Gebert „Semantyka aspektu czasownikowego”)*, „Biuletyn polskiego towarzystwa językoznawczego”, 52, s. 9-56.
- Karolak S. (2005), *Semantyka i struktura aspektu w językach naturalnych*, Kielce.
- Karolak S. (2008), *Semantyczna kategoria aspektu*, [w:] Koseska-Toszeva V., Penčev J. (red.), *Gramatyka konfrontatywna bułgarsko-polska*, 8, Warszawa.
- Kokorniak, I. (2018), *Aspectual modeling of mental predicates in English and Polish: A cognitive linguistic perspective*, Poznań.
- Malchukov, A. (2011), *Interaction of verbal categories: resolution of infelicitous grammeme combinations*, *Linguistics*, 49(1). 229–282.
- Seretny, A. (1998), *Definicje i definiowanie*, Kraków.
- Smith, C. (1991), *The parameter of Aspect*, Dordrecht.
- Smith, C. (1994), *Aspectual Viewpoint and Situation Type in Mandarin Chinese*. “Journal of East Asian Linguistics”, 3, nr 2, s. 107–46.
- Tang S. (2016), *Aspectual system*, [w:] Huang C., Shi D. (ed.), *A Reference Grammar of Chinese*, Cambridge, s. 116-143.
- Xiao, R.T. McEnery (2004), *Aspect in Mandarin Chinese: A Corpus-based Study*, Amsterdam.
- Vendler Z. (1957), *Verbs and Times*, „The Philosophical Review”, 66, nr 2, s. 143-160.

CORPUS

BCC corpus [<http://bcc.blcu.edu.cn/>]

