South Asian Languages Analysis

SALA- 35

October 29-31, 2019

Institut national des langues et civilisations orientales
65, rue des Grands Moulins, Paris 13

Organizer:
Ghanshyam Sharma

Sceintific Committee:
Anne Abeillé (University of Paris 7, France)
Rajesh Bhatt (University of Massachussetts, USA)
Tanmoy Bhattacharya (University of Delhi, India)
Miriam Butt (University of Konstanz, Germany)
Veneeta Dayal (Yale University, USA)
Hans Henrich Hock (University of Illinois, USA)
Peter Edwin Hook (University of Virginia, USA)
Emily Manetta (University of Vermont, USA)
Annie Montaut (INALCO, Paris, France)
John Peterson (University of Kiel, Germany)
Pollet Samvelian (University of Paris 3, France)
Anju Saxena (University of Uppsala, Sweden)
Ghanshyam Sharma (INALCO, Paris, France)

Collaborators:
François Auffret
Francesca Bombelli
Petra Kovarikova
Vidisha Prakash

Table of Contents

5

9

11

INVITED TALKS

[1] *Implications of Feature Realization in Hindi-Urdu: the case of Copular Sentences* ― Rajesh Bhatt, University of Massachusetts, Amherst (joint work with Sakshi Bhatia, IIT Delhi)

Bejar & Kahnemuyipour (2017) and Keine, Wagner & Coon (2018) have documented the existence of person hierarchy effects in copular sentences in Eastern Armenian and German respectively. In addition, Keine, Wagner & Coon (2018) point out the evidence of number hierarchy effects in this domain in German. We investigate copular sentences in Hindi-Urdu where we find hierarchy effects similar to the ones identified for German. But the distribution of the hierarchy effects is sensitive to not just the hierarchy but the realization of the agreement. In particular, person hierarchy effects disappear/weaken in the past tense which in Hindi-Urdu does not code person. Person hierarchy effects are also weakened in environments such as gapping and right node raising if the elliptical process in question allows for the offending agreeing head to go unrealized. We relate our results to Preminger (2019) which argues against agreement relationships that would lack realization.

[2] *Word Order Effects and Particles in Urdu Questions* ― Miriam Butt, Konstanz University, Germany

This talk looks at the effects of word order variation in Urdu questions. In pursuing our research, we have studied the interaction of prosody, syntax and semantics/pragmatics in Urdu questions and have been able to establish that much of the empirically established word order variation is conditioned by information packaging effects rather than syntax-internal triggers. We provide evidence for this with respect to both wh-constituents and polar questions along with data concerning the prosody of particles (focus and case marking) that we are still in the process of puzzling out.

[3] *The Multiple Faces of Hindi-Urdu* bhii ― Veneeta Dayal, Yale University, USA

The Hindi-Urdu particle *bhii* is often taken in recent semantic literature to be the lexical correspondent of English *even*, following an influential proposal by Lahiri (1998). I provide empirical evidence to show that this characterization is incorrect, at least in its simplest form. I start instead with what I take to be the basic meaning of *bhii*, namely an additive expressions more in line with English *also,* and derive the *even* meaning from its interaction with focus. I provide evidence from internal and external *bhii, ek bhii bacca* "one also child" vs. *ek baccaa bhii* "one child also", as well as from correlatives which are semantically definite, not indefinite, *jo bhii laRkii* "which also girl", to argue against the standard view of *bhii* as *even*.

[4] *Kashmiri and the verb-stranding verb-phrase ellipsis debate* ― Emily Manetta, University of Vermont, USA

One of the more intriguing debates concerning ellipsis in recent work centers on so-called verb-stranding verb phrase ellipsis (VVPE). First identified in languages as diverse as Irish (McCloskey 1991), Hebrew (Doron 1991, Goldberg 2005), Portuguese (Martins 1994), Russian (Gribanova 2013a, b), and Hindi-Urdu (Manetta 2018), VVPE is argued to occur when an inflected verb moves outside of a VP-sized category which is then elided, resulted in the stranding of the verb in the absence of associated VP-internal material.

Recently Landau (2018, to appear) argues against the existence of VVPE at all, claiming that what might at first appear to be VVPE is a more targeted ellipsis process more familiar from accounts of East Asian languages (Oku 1998; Kim 1999; Takahashi 2008), called Argument Ellipsis. Landau suggests that larger, clause-sized ellipsis processes that strand main verbs, such as Polarity Ellipsis (e.g. Gribanova 2017) may also be at work. We will consider these claims through an investigation of verb movement and ellipsis in Kashmiri.

The Indic language Kashmiri (relatively under-represented in theoretical literature) appears to exhibit both English-style auxiliary-stranding VPE (in (1)) and verb-stranding VPE, in (2).

(1) a. Təm cha ciTh' liich-mIts ganT-as.
  3SG.ERG.M AUX.PST.F letter.F write-PSP.F hour-for
   'He has written a letter for an hour.'
 b. tami   ti **cha** ____.
  3SG.ERG.F also AUX.PST.F
  'She also has (written a letter for an hour).
(2) a. tsI di-kh   pagaah təmis kitaab
  2SG.NOM give-FUT.2SG tomorrow 3SG.DAT book
  'You will give him a book tomorrow'
 b. Kabir ti **di-yi** ____.
  Kabir also give-FUT.3SG
  'Kabir will also (give him a book tomorrow)' (lit. 'Kabir will also give.')

Landau (to appear) establishes a new account of the licensing conditions for ellipsis, with a particular focus on excluding, both empirically and theoretically, VVPE. Underlying Landau's proposal is the old question of why auxiliary fronting (Aux-to-C) is incompatible with sluicing as in in (4), though required in a full wh-question, as in (5):

(3) Pete appointed someone.
(4) Who?/*Who did?
(5) Who did he appoint?/*Who he did appoint?

Landau's analysis in essence is that headless ellipsis is controlled and constrained by the head of the elided category, and that it is licensed only if the stranded head has not crossed a spellout domain. In the ungrammatical version of (2), the auxiliary has crossed the TP spellout domain, meaning ellipsis of TP will not be licensed in this case. Similarly, in a canonical approach to VVPE, the verb will cross the VP spellout domain, thereby failing to license ellipsis of vP. Thus, in this view, head movement bleeds ellipsis.

This account of head movement and ellipsis faces an important test in the case of Kashmiri; Kashmiri finite clauses are strictly verb-second. The verb bearing tense and agreement, whether auxiliary or main, is widely understood to be located in C, while the preverbal XP is located in Spec, CP (Wali and Koul 1998; Manetta 2011; c.f. Munshi and Bhatt 2009). In this way, Kashmiri thus completes the typology proposed in Sailor 2018 for V2 languages and constituent ellipsis: it is a language with obligatory verb movement out of vP that exhibits both Aux-stranding and V-stranding ellipsis forms (Manetta, to appear). As the language is often overlooked in research on V2, it is unsurprising that previous work had assumed that V-stranding ellipsis did not occur in V2 languages. Landau's account would predict that Kashmiri would have neither Aux-stranding nor V-stranding ellipsis (whether VP-sized or TP-sized), counter to our apparent understanding of (1)-(2).

There are (at least) three distinct possibilities to consider seriously in resolving this puzzle: first, it is of course possible that VVPE exists as analyzed over the past decades and that Landau's new approach is off the mark – we will set this notion aside for now. Second, we could assume that Kashmiri has Aux-stranding ellipsis and AE, but no VVPE. The upshot of this would be that we must then posit distinct landing positions for second position auxiliaries and second position main verbs in V2 clauses. A third possibility is that second position verbs in Kashmiri do not target C, but some lower projection (or set of lower projections), perhaps following proposals in Munshi and Bhatt (2009). The question is whether, in this scenario, the stranded heads would not cross a spellout domain, and thus remain capable of licensing the relevant ellipsis. This paper will investigate the second and third possibilities mentioned here in detail, examining whether either alternative is supported by the facts in Kashmiri. Of course, if neither of these explanations pan out, we are then forced to reconsider the first alternative presented above, and establish how Kashmiri has particular characteristics that support the existence of Verb-stranding ellipsis in the grammar.

References
Bhatt, Rakesh. 1999. Verb Movement and the Syntax of Kashmiri. Dordrecht: Kluwer.
Doron, Edit. 1999. V-movement and VP ellipsis. In *Fragments: Studies in ellipsis and gapping*, ed. Shalom Lappin and Elabbas Benmamoun, 124–140. New York: Oxford University Press.
Gribanova, Vera. 2013a. Verb-stranding verb phrase ellipsis and the structure of the Russian verbal complex. Natural Language and Linguistic Theory 31(1): 91–136.
Gribanova, Vera. 2013b A new argument for verb-stranding verb phrase ellipsis. Linguistic Inquiry 44(1): 145–157.
Gribanova, Vera. 2017. Head movement and ellipsis in the expression of Russian polarity focus. *Natural Language and Linguistic Theory 35*.1, 1-43.
Kim, Soowon. 1999. Sloppy/strict identity, empty objects, and NP ellipsis. *Journal of East Asian Linguistics* 8: 255–284.
Landau, Idan. 2018. Missing Objects in Hebrew: Argument Ellipsis, not VP Ellipsis. *Glossa* 3(1). 76, 1-37.
Landau, Idan. To appear. Constraining Head-stranding Ellipsis.
Manetta, Emily. 2011. *Peripheries in Kashmiri and Hindi-Urdu: The Syntax of Discourse-Driven Movement.* Amsterdam: John Benjamins.
Manetta, Emily. 2018. VP-ellipsis and complex predicates in Hindi-Urdu. *Natural Language and Linguistic Theory.* doi.org/10.1007/s11049-018-9429-9.
Manetta, Emily. To appear. Expanding the Typology of V2 VPE: The case of Kashmiri. in Biberauer, Theresa, Sam Wolfe, and Rebecca Woods (eds). *Rethinking Verb Second.* Oxford: Oxford University Press.
Martins, Ana-Maria. 1994. Enclisis, VP-deletion and the nature of sigma. *Probus* 6: 173–205.
McCloskey, James. 1991. Clause structure, ellipsis and proper government in Irish. *Lingua* 85: 259–302.
Munshi, Sadaf and Rajesh Bhatt. 2009. "Two locations for negation". In Linguistic Variation Yearbook 2009, Van Craenenbroeck, Jeroen (ed.), 205–240.
Oku, Satoshi. 1998. *A theory of selection and reconstruction in the minimalist perspective.* PhD dissertation, University of Connecticut.
Sailor, Craig. 2018. The typology of head movement and ellipsis: a reply to Lipták & Saab (2014). *Natural Language & Linguistic Theory*. 10.1007/s11049-017-9391-y.
Takahashi, Daiko. 2008. Quantificational null objects and argument ellipsis. *Linguistic Inquiry 39*:307-326.
Wali, Kashi. and Omkar Koul. 1997. *Kashmiri.* New York: Routledge.

[5]   *Expressiveness and inter-subjectivity in Hindi reduplication* ― Annie Montaut, INALCO, Paris

The vast category of Hindi expressives has mainly been studied in terms of morphonological structure (Singh 2003, 2005), grammatical function (Abbi 1980), involving the semantics of the structure (Abbi 1992, Montaut 2007), areal convergence (Emeneau 1969, Abbi 1992), and relation between form and meaning (Montaut 2008, 2009). It is now generally assumed that the purely 'expressive' dimension of such devices

is an important part of language in a typological perspective (Dingemanse 2012, 2018), and the talk will follow this line.

A general picture of Hindi expressive devices would include onomatopeics, usually reduplicated, which widely contribute to the enrichment of the lexicon in an iconic way for all types of physical or psychic perceptions of reality; total reduplication of lexical items, fully grammaticalized for certain categories (numeral and participles); echo formations involving the substitution of the initial consonant, supposed to extend the meaning of the simplex form; pairs of related words (synonym, antonym, or complementary words) or "semantic reduplication" (Vacek 1989).

I intend to focus on the sub-categories deemed "stylistic" or "expressive", showing that the semantic effects resulting from the use of a given form of reduplication (total, partial, or 'semantic') are not random, even if the mechanisms ruling the association of form and meaning are quite complex and often require the inter-subjective context to be properly accounted for (total reduplication of adjectives is not always distributive, intensive or attenuative as assumed), an inter-subjective dimension ignored in the most successful attempts to account for the phenomenon in terms of iconicity (Kouwenberg 2003, Kouwenberg & LaCharité 2001, 2005, Klamer 2004, Kyomi 2005, Parkwal 2004). Similarly, partial reduplication in echo-words does not always as assumed produce the "etc.", "and the like" meaning, and often conveys parody, or polemical derogatory meanings.

One can aim at principled explanations as I did previously, trying to integrate into grammar the unaccounted meanings: the echo formations may be interpreted as bearing on the notional domain itself, by reshaping the contours of the notion, whereas total reduplication bears on the occurrence of the notion, modifying the scheme of individuation of the notion. Yet the intersubjective dimension is crucial in all the cases with no clear or systematic grammaticalized meaning, whether when the reduplicated form amounts at representing the ideal degree in a given situation in conformity with the addressee's expectation, or when the echo-word tends to disqualify the addressee's viewpoint or win over his reluctance, or to dismiss a shared opinion. A wider context than the bare statement is of course required for analyzing these mechanisms of inter-subjectivity, which are ultimately linked with the subjective appropriation of the language and its creative use. Similar results obtain from the study of 'semantic reduplication' (*ghūmnā-phirnā* [turn/take a walk-circle], "wander around", *ṭūṭā-phūṭā* [broken-burst] "torn out/in a poor condition", *sīdhā-sādhā* [straight/right-plain/ *sada*:authentic] "honest/authentic/straightforward"), which do not always, as expected, provide for some kind of hyperonymic meaning by filtration of the respective semantic features of each component and fusing the compatible features only: what is remarkable is that such compounds, like other forms of reduplication, always add to the discourse a colloquial flavour, making the statement feel more convivial, loaded with more intimacy and 'authenticity'.

This property evokes the German "modal particles" which according to Weydt (2006) may be omitted without the text losing its general meaning, but make the discourse more "natural" and "authentic", more "friendly". A marked difference is that, whereas the modal particles of Germanic languages, as well as the Hindi discourse particle *to*, essentially involve the validation or the discussion of the other's viewpoint (argumentative function), Hindi reduplication is more concerned with the speaker's own way of expressing his own viewpoint and feeling about the situation. The personal appropriation by the speaker of the linguistic material (at phonological, morphological and semantic levels) in order to playfully create his own use of reduplication and eventually his own forms, as pertaining to what Jakobson called the "poetic function", is an important source of creative colloquial exchange. Other sources for slang, jargon or familiar lexicon such as metaphor have been extensively studied as creative devices in various languages, probably originating from personal invention and then accepted as a marginal sociolect. Reduplication, particularly partial, may play a similar role in language creativity, like in the French new Verlan the inversion and vowel alteration

("*keuf*" for policeman, from "*flic*" and/or "*fuck*", *feuje*" for Jewish from "*juif*", "*rebeu*" for Arab from "*beur* < "*arabe*", "*beu*" for herb/cannabis from "*herbe*"), leading from idiolect to sociolect and then widely accepted popular language.

References
Abbi, Anvita. 1980. Semantic Grammar of Hindi, A Study in Reduplication. Delhi: Bahri Publications.
Abbi, Anvita. 1992. Reduplication in South Asian Languages. An Areal, Typological and Historical Study. Delhi: Allied Publishers.
Dingemanse, Mark. 2012. Advances in the Cross-Linguistic Study of Ideophones. *Language and Linguistic Compass 6/10*: 654-672.
Dingemanse, Mark. 2018. Redrawing the margins of language: Lessons from research on ideophones. *Glossa: a journal of general linguistics* 3(1) 4: 1–30.
Emeneau, Muray B. 1969. Onomatopoeics in the Indian Linguistic Area. *Language* 45-2: 294-99.
Hurch, Bernard (ed.). 2005. *Studies in Reduplication*. Berlin/New-York: Mouton de Gruyter.
Kiyomi, Setsuko. 1995. A New Approach to Reduplication: a Semantic Study of Noun and Verb Reduplication in Malayo-Polynesian Languages. *Linguistics* 33-6: 1145-1167.
Klamer, Mariam. 2001. Expressives and iconicity in the lexicon. In Voelts, F., K.E. Arard & Christa Kilian-Hatz (eds.). *Ideophones*, 105-81. Amsterdam: Benjamins.
Kouwenberg Sylvia & Darlène LaCharité. 2001. The iconic interpretation of reduplication: Evidence from Caribbean Creole languages. *European Journal of English Studies* 15: 59-80.
Kouwenberg, Sylvia & Darlène LaCharité. 2005. Less is More: Evidence from Diminutive Reduplication in Caribean Creole Languages. In Hurch (ed.), 533-45.
Kouwenberg, Sylvia (ed.). 2003. Twice as Meaningful: Reduplication in Pidgins, Creoles and other contact languages. Londres: Batlebridge.
Mattes, Veronica. 2014. *Types of Reduplication: A case study of Bilkol*. Berlin/Boston: De Gruyter.
Montaut, Annie. 2009a. Réduplication et constructions en écho en hindi/ourdou. *Faits de Langue, Les Cahiers 1*, 9-44.
Montaut, Annie. 2007. Formes et valeurs de la reduplication totale en hindi/ourdou. *Faits de Langue* 29, *La Réduplication*:175-190.
Montaut, Annie. 2009. Reduplication and Echo-Words in Hindi. *Annual Review of South Asian Languages and Linguistics*, Rajendra Singh (ed.). Mouton de Gruyter: 21-90.
Parkvall, Michael. 2003. Reduplication in Atlantic Creoles. In Kouwenberg (ed.), 19-36.
Singh, Rajendra. 2003. Reduplication in Modern Hindi and the Theory of Reduplication. *Annual Journal of South Asian Languages and Linguistics*: 155-171.
Singh, Rajendra. 2005. Reduplication in Modern Hindi and the Theory of Reduplication, In Hurch (ed.). *Studies in Reduplication*, 263-81. Berlin/New-York: Mouton de Gruyter.
Vacek, Jaroslav. 1989. 347 On Semantic Reduplication in Indian Languages (In the Margin of Language Universals). *Archiv Orientalni 57*: 347-358.
Weydt, Harald. 2006. What are particles good for? In Fischer Kerstin (ed.), *Approaches to Discourse Particles*, Oxford: Elsevier.

[6]   *Blast from the past – The distribution of morphosyntactic features in modern languages as the key to unlocking the linguistic history of eastern central South Asia and beyond* — John Peterson, University of Kiel, Germany.

Recent advances in quantitative methods and their practical application for linguistic data, together with detailed descriptions for an increasing number of linguistic varieties from all language families throughout the South Asian subcontinent, have led to an upsurge in the past few years in studies and research projects devoted to reconstructing the linguistic prehistory of South Asia, taking the structures of the modern languages as their point of departure.

In my talk I will summarize preliminary research by myself and colleagues at the University of Kiel from an ongoing project into the areal and genealogical distributions of morphosyntactic features in the languages of South Asia, in an attempt to begin to unravel the linguistic prehistory primarily of the eastern central part of the subcontinent. Although our research focuses primarily on the Indian state of Jharkhand and its immediate surroundings, data on ca. 50 languages from throughout the entire subcontinent is also being collected. These languages include Indo-Aryan, Dravidian and Austro-Asiatic languages as well as the isolates Burushaski, Kusunda and Nihali, and the features we are studying include information on pronominal paradigms, lexical typology, case alignment and its interrelations with TAM and person, non-nominative subjects, "echo word constructions" or melodic overwriting, "v2s" or auxiliary verbs in the so-called "vector-verb construction", alienable and inalienable possession distinctions, number and gender systems, and numeral classifiers. This information derives both from published sources and information from language experts, but also from original research undertaken by the members of the project on Indo-Aryan, Dravidian and Munda languages of the region.

Although still preliminary, the distributions of these features already give us a first glimpse into possible contact scenarios in earlier times in this region, which we hope will ultimately contribute to our knowledge of the linguistic prehistory of this part of South Asia and beyond.

[7] *Phonological Properties of Aphasic Speech Errors in Hindi* ─ Dinesh Ramoo, Department of Psychology, Thompson Rivers University, Canada

Aphasia research in non-European languages is rare even in this century (Beveridge & Bak, 2011). While European languages boast a vast array of research and treatment studies, South Asian languages such as Hindi (which accounts for about 2.78% of the world's population), have only a handful. Even these studies focus on sentence production and comprehension (Balasubramanian & Bose, 2016; Bhatnagar, 1990; Vaid & Pandit, 1991; Venkatesh, Edwards, & Saddy 2012) rather than phonology. Such a gap is a severe barrier in the development of diagnostic criteria for language disorders in Hindi as well as a setback for those who are trying to develop rehabilitation procedures. This study is an attempt to rectify that gap by providing a detailed linguistic analysis of speech errors from five Hindi aphasic patients.

Initially, 11 participants diagnosed with aphasia were recruited from the Delhi area via speech therapists associated with local hospitals. All participants and their caretakers were informed about the study and took part in it voluntarily. Initial assessment included adaptations based on some PALPA tasks with non-word minimal pairs, word minimal pairs, auditory lexical decision, auditory digit span, auditory matching span, and word-picture matching in Hindi. These initial assessments allowed us to select 5 participants out of 11 (the others being excluded due to extreme speech and comprehension issues).

The experimental tasks consisted of repetition, reading and picture-naming. The patients' responses were digitally recorded and then analyzed for speech errors. Phonological speech errors are errors involving the phonemes (or segments) of a word where one or more segments are produced incorrectly (either by substitution, deletion, insertion or movement). These errors could be similar to another word in that language (lexical errors; *e.g.*, 'cable'>'sable') or a non-word (non-lexical; *e.g.*, 'house'> 'pouse'). All participants produced more non-lexical errors than lexical errors. Non-lexical errors were classified into individual, sequence and multiple errors. Multiple errors involved more than 3 non-consecutive segments which made them difficult to analyse (excluding them from further analysis). Sequence errors involved more than one segment in sequence and individual errors were classified if there were less than 3 isolated segments. All participants produced more individual errors than others. Individual errors were classified as substitutions, deletions, insertions and ordering errors. Substitution errors occurred more often than others. Vowel insertions occurred more often than deletions while consonant deletions occurred more often than insertions. This is not always the case in all languages (*e.g.*, Italian *see* Romani *et al.*, 2011) and it is possible that the presence of a central vowel (schwa) in Hindi allows for insertion rather than deletion to be the preferred method for simplifying complex syllable structures. In terms of syllable structure, Hindi has a maximum syllable structure of CCVCC. All participants made significantly more simplifications than complications in repetitions (χ^2=174.3, p<.001) and reading (χ^2=158.9, p<.001).

Phoneme substitutions were also analysed for markedness. South Asian languages have linguistic elements (such as phonemic aspiration and retroflex consonants) that are not found in most European languages; providing us with some interesting observations. Substitutions were checked for voicing, stopping, fronting, aspiration and retroflexion. Segments that were voiced, aspirated or retroflexed were considered marked as were segments that were produced near the back of the mouth (velar segments). Stops were considered less marked than other obstruent segments. Hindi aphasic patients were found to show markedness effects in terms of fronting, aspiration and retroflexion (going from marked segments to less marked segments). The patients did not show any markedness effects for voicing and stopping. This might indicate the Hindi

19

speakers might have a different markedness hierarchy from which to choose when simplifying phonemes during substitution.

Comparing the error patterns of Hindi and other languages in the South Asian language area with existing data from European languages has the potential to elevate the diagnostic tools in these languages. It can also provide new insight into linguistic categories such as syllable structure and markedness opening up new avenues of research.

References

Balasubramanian, A. & Bose, A. (2016). Manifestation of Agrammatism in Hindi-English Bilingual Aphasia. *Front. Psychol*. Conference Abstract: 54th Annual Academy of Aphasia Meeting. doi: 10.3389/conf.fpsyg.2016.68.00034

Beveridge, M. E. L. & Bak, T. H. (2011) The languages of aphasia research: Bias and diversity, *Aphasiology,* 25(12), pp 1451-1468

Bhatnagar, S.C. (1990) Agrammatism in Hindi: A case study. In L. Menn & L. Obler (Eds.) *Agrammatic aphasia: a cross-linguistic narrative sourcebook*. Philadelphia: John Benjamin's.

Romani, C., Galluzzi, C., Bureca, I., & Olson, A. (2011). Effects of syllable structure in aphasic errors: Implications for a new model of speech production. *Cognitive Psychology*, 62.151–192.

Vaid, J. & Pandit, R. (1991) Sentence interpretation in normal and aphasic Hindi speakers. *Brain and Language*.

Venkatesh,.M., Edwards, S., & Saddy, J. D. (2012) Production and comprehension of English and Hindi in multilingual transcortical aphasia. *Journal of Neurolinguistics*, 25(6), 615–629.

[8]   *Essentials of Urdu lexicology and morphology for a compact bilingual dictionary* ─ Alain Désoulières, INALCO, 65 rue de Grands Moulins, Paris

This study originates from my on-going research and compilation work of an *Essential French Urdu Dictionary®*. This compact *French Urdu Dictionary* is meant to be a practical text-book for second language learners, with a limited Urdu corpus of approximatively 7000 Urdu words and at least an equal number of collocations and phrases, with Urdu as a target language i.e. aiming at describing essential aspects of Urdu lexicology and morphology: North Indian and Indo Persian derivation / composition, word structure and main principles. This dictionary also includes many specialized bilingual glossaries, extracted from the main French Urdu corpus and of peculiar interest for   foreign learners, with lexical and semantic classification.

I Basic questions

The paper discusses two challenging questions:

A. How should lexical entries be presented in such a bilingual dictionary, technically speaking ?

B. How to introduce Urdu lexicology and morphology for second language learners ? Which topics should be selected for the compilation of specialized bilingual glossaries ?

Some answers:

II Technical presentation: Presentation and consecutive paper will provide French entries with English translation or equivalent showing proposed Urdu *equivalent translation,* scientific transliteration with Nastaliq Urdu orthography *(the latter not in this abstract*) lexical category and grammatical plus linguistic origin / etymology: e.g. North Indian (N I) / Indian Persian. Presentation shall be the same in samples of specialized bilingual glossaries.

III Bilingual glossaries

A . Some lexical bilingual glossaries:

Lexicological glossaries: schemes of derivation/composition from Urdu stems and root words, derivation, composition diagrams and tables. Some typical lexical glossaries:

creation by composition and derivation from the Indo Persian stem [rau] (*going)*: e g [xud rau] (literally *self-going*, actual meaning French *sylvestre/sauvage*, sylvan/wild], [sāl e rawāñ] (*année courante, current year*) [jahāz rānī] (*navigation)*

Idem from the Indo Persian stem [-dān] (*container)* [rośan dān] (*puits de lumière/light shaft*] [cūhe dān] (*souricière/mouse trap*); opposed to [-dān] (*knowing)* : [urdū dān] (*Urdu knowing, connaissant l'ourdou, Urdu specialist),* [siāsat dān] (*knowing politics, politicien, politician)*

Idem from the -īlā, ilī masc. and fem. N I adjectival suffix compared to French adjectival suffix -eux -euse (English -ous): e g [camak] –> [camkīlā, ilī] (re *sheen/ lumen/luminous/lumineux),* [ḡussā] –> [ḡussīlā, ilī] (re *rage- fury/furious/furieux)*

Glossary of N I and Indo Persian doublets in Urdu: e g [sāz o sāmān] (*equipment),* [joś o xaroś] (*excitation, enthusiasm),* [taxt o tāj] (*trône et couronne/throne and crown* i. e. royal power) [ajīb o ḡarīb] (*étrange-bizarre/strange-bizarre*) re also echo-words.

Some NI and Indo Persian antonyms [ārām deh] vs [be ārām] (*confortable* vs *inconfortable/comfortable* vs *uncomfortable*) [xuś] vs [nā xuś] (*content* vs *mécontent/happy* vs *unhappy)*

Some NI and Indo Persian oxymorons [māñ-bāp] (*mother and father/parents*) [din rāt]/[shab o roz] (*nuit et jour/ night and day*) [len den] [xarīd o faroxt] (*échange -commercial/exchange -commercial exchange*) [dar ham bar ham] (*pêle-mêle, sens dessus-dessous/topsy-turvy, jumble-muddle*) re echo-words.

B. Semantic bilingual glossaries based on peculiar lexical themes:
- colloquial and technical aspects of "*navigation*" lexical field (colloquial and technical aspects) [jahāz] (*vaisseau/vessel, ship)* [jahāz rānī] (*navigation),* [jahāz rāñ] (*navigator*)

Idem: "*politics*" lexical field [siāsat] (*politics/la politique*) [siāsī] (*political/politique,* adj.)

"*literature*" lexical field: [adab] (*littérature/literature*) [urdū adab] (*littérature ourdou/Urdu literature*) [afsānā nigār] (*nouvelliste/short story writer)*

C. Urdu lexicography For a short guide to Urdu lexicography for learners ? (essential and critical bibliography).

Essential bibliography (not included in 500 word abstract):
Bilingual Dictionaries
Platts, John T. *Urdu, Classical Hindi and English Dictionary*, Oxford University Press, 1884, 5th reimpression 1930-1974
Qureshi, B. A., *Kitabistan New Millenium Urdu English Dictionary / Kitabistan's 20th Century Urdu English Dictionary, s d c. 1970,* New Ed. c. 2006 Lahore
Qureshi, Bashir A. *Advanced 21st Century English-English-Dictionary,* Educational Publishing House New Delhi 2012
Shan Ul Haq Haqqee,*Oxford English Urdu Dictionary,* Oxford University Press, 2003
Monolingual Dictionaries
S. Shahab Ud Din, Maulavi Hafiz Ud Din et al. *Muxtasar Urdu Lughat (Brief Urdu Dictionary)* National Council for the Promotion of Urdu Language, New Delhi, 1987, 4th Ed. 2013,

Prof Abdul Haq *Asri Lughat* Shoba e Urdu, Dehli University, New Delhi 1997

Shamsur Rahman Farooqi, *Lughat e Roz marrah*, Anjuman e Tarraqi e Urdu, Hind, Urdu Ghar, New Delhi, Third, revised Ed. 2011

Maulavi Firoz Ud Din (Ed.) *Urdu Jami' Firoz ul Lughat, Nea rangeen Edition, jaddid tartib izafon ke sath*, New Ed. in colour, revised by Firoz Sons Editorial Team, Lahore, 2005

Maulavi Firoz Ud Din (Ed.) *Jami' Firoz ul Lughat, Na'i tartib izafon ke sath/ Firoz' s [Urdu] Dictionary, new presentation with additions,* Educational Publishing House New Delhi 2016

Methodology:

Pawzel Szudarski *Corpus linguistics for vocabulary; a guide for research*, Routledge London and NewYork, 2018

Béjoint, H. et Thoiron, Ph. et alii *Les dictionnaires bilingues* Ed. Duculot, Louvain La Neuve, 1996

Coates, Richard *Word structure*, Language Workbooks, Routledge London and NewYork, 1999-2005

Bauer, Laurie, *Vocabulary*, Language Workbooks, Senior Editor: Richard Hudson. Routledge London and NewYork, 1998-2005

[9]   *Semantic field of falling in Western New Indo-Aryan Languages (Hindi-Urdu, Punjabi and Gujarati) —* Luidmila Khokhlova, Moscow State University, Russia

The objective of the present paper is to define cognitively relevant aspects of falling that obtain their specific lexical coding in three Western Indo-Aryan languages: Hindi-Urdu, Punjabi and Gujarati. The study employs the methodology proposed by the Moscow Lexical Typology Group implying the description of lexical items through combinability descriptions. This method implies resorting to a number of sources and tools: dictionaries, corpora and specially designed questionnaires used in fieldwork. The paper brings to light the main parameters and frames that govern the lexical choice in the domain of falling in Western NIA, the dominant lexemes of the domain and special lexemes that are used to describe certain subtypes of falling; it describes also metaphorical shifts of the main lexemes of the domain.

The prototypical situation of falling is vertical downward motion caused by gravity. It is described by the dominant lexemes of the domain: H-U. *girnā*, P. *ḍignā*, G. *paṛvuⁿ*. These lexeme cover the largest share of all relevant frames, they are used also to describe the situation when the trajector changes its initial vertical orientation and still resides on the same surface (trees in the storm, a man on a slippery ground).
Meanwhile certain situations of falling can lie within the scope of both the dominant lexeme and a lexeme with more specific semantics. Collapsing buildings or other constructions (like bridges) in addition to dominant lexeme may be incoded by H-U *ḍhahnā, uṛnā*; P *ḍhahiṇā, uḍnā*, G *paṛvuⁿ, ḍhalvuⁿ, uḍvuⁿ* (H-U. *uṛnā*, P. *uḍnā*, G. *uḍvuⁿ* 'to fly' are used in case of explosion).

Separation of part from the whole (usually multiple objects like hair, leaves from the tree etc.) may be indicated by a particular falling predicate: H-U and P. *jhaṛnā*. Falling of ripe fruits is described by ideophonic verbs: H-U. *ṭapaknā*, P. *ṭapakṇā*, G. *ṭapakvuⁿ* 'to drop'. Precipitations in H-U. and G. are described both by the dominant and special lexemes: H-U. *girnā, paṛṇā, barasnā,* G. *paṛvuⁿ, varasvuⁿ*. In Punjabi, precipitations are incoded by the verbs *paiṇā* and *varhṇā,* not by the dominant lexeme of the domain *ḍignā*. However, *ḍignā* may be used to describe the waterfall. Some verbs of falling are used only in one language. For example, Punjabi employs the verb *latthṇā* denoting seperation of part from the whole.

Hindi-Urdu, Punjabi and Gujarati share the following metaphorical shifts from the dominant lexemes of the domain (H-U. *girnā*, P. *ḍignā*, G. *paṛvuⁿ*): 1) to lower (about the level of water, blood pressure, temperature, prices, living standards etc); 2) to degrade morally; 3) to fall about a of shadow.

Many metaphors are derived from the cognates H-U. *paṛṇā*, P. *paiṇā*, G. *paṛvu^n*, among them only G. *paṛvu^n* is the dominant lexeme of the falling domain: 1) to come: about time of the day (compare English nightfall), season (summer, winter), darkness etc., about news, rumours etc. 2) to be heard: about sound, voice; 3) to fall on somebody: about problems, blows, sights, influences, suspisions, problems, misfortunes etc; 4) to fall on somebody's neck or head – to impose oneself on somebody, bother somebody, be a burden to somebody; 6) to fall into trouble, crisis, doubt etc.; 7) to fall into some occupation – to be employed in a trade or occupation, to start doing something (frequently with negative sence); 8) to fall into one's business – to interfere into somebody' affairs; 9) to fall into thoughts – to immerse in thoughts. Combinations of adjectives/adverbs with the cognates H-U. *paṛṇā*, P. *paiṇā*, G. *paṛvu^n* have a wide range of meanings like H-U. *halkā paṛṇā* 'to become less heavy'; P. *dūr paiṇā* 'to be situated far'; G. *ā^{n}dolan-mā^n āgaḷ paṛvu^n* 'to become the leader of the political movement' etc.

The main metaphors of the cognates H-U. *barasnā*, P. *varhṇā*, G. *varasvu^n* usually have the meaning of both good (like blessings of life) and bad (like blows) things raining down upon somebody. The cognates H-U. *ḍhahnā,* P. *ḍhahiṇā,* G. *ḍhalvu^n* figuratively denote destruction of plans, undertakings, disappearance of inspiration etc. However, government downfall is usually described by the dominant lexeme of the domain. Ideophonic verbs: H-U. *ṭapaknā*, P. *ṭapakṇā*, G. *ṭapakvu^n* 'to drop' have metaphorical meaning of someone's unexpected appearance. Punjabi verb *latthṇā* denotes setting sun, loss of honour, shame, loss of a post, moral degradation etc.

Some metaphors are used only in one language. In G. *galu^n paṛvu^n* means 'to have sore throat', compare with H-U '*galā baiṭhnā'*, lit. to sit down (about the throat). In Gujarati, but not in H-U and Punjabi, the verb *paṛvu^n* may be used to describe family relationships or relations in society: *tame śeṭh paṛyā ne hū^n cākar paṛyo* 'You are (my) master, I am (your) servant'.

Similar expression may have different meanings in different languages: in G. *laṛāī mā^n paṛvu^n* means 'to die on the battlefield', in H-U. *laṛāī me^n paṛnā* has the meaning 'to start fighting', while the meaning 'to die on the battlefield' is expressed in H-U by the dominant lexeme of the domain *girnā*: *laṛāī me^n gir paṛnā*. These differences in metaphorical shifts are a rich source of all kinds of semantic interference between described languages.

References
Panina, A.S. *Verbs of falling in Japanese.* // Papers of Moscow State University, series 13, № 2, 2018, p. 3-13.
Reznikova, T.I & Vyrenkova A.S. Semantics of Falling: A Cross-Linguistic Approach.// Working papers, *series*: Linguistics. Higher School of Economics, available at https://wp.hse.ru/data/2015/12/29/1136293661/40LNG2015.pdf

[10]   *On semantic-grammatical correspondences between Old Indo-Aryan (OIA) and Russian (the domain of relations between 'roles' and 'cases')* ▬ Boris Zakharyin, Moscow State University, Russia

Pāṇini in '*Aṣṭādhyāyī*' has formulated rules for generating correct sentence-structures in OIA, and commentators have presented samples for illustrating those sūtras. But neither Pāṇini, nor his followers have provided semantic decoding of sentences and attempted thus determined the meanings-based motives for assignment of cases (*vibhakti*) to sets of Ө-roles (*kāraka*) demanded by concrete verbs. There are no informants on OIA nowadays, and it may be supposed that Russian data based on utterances semantically equivalent to those of OIA may be of help in solving the problem.

According to Pāṇini's main sūtra **2.3.2,** Patient (*karman*) is regularly marked in Sanskrit by the 2nd triplet of case-number inflections (that is, by accusative). But in sūtra **2.3.3** he states that in Vedic the Patient of *hu-* 'to sacrifice' might also be expressed by the 3rd triplet (that is, by instrumental), and *Kāśikā*, the 7th century commentary, is thus illustrating this [*Kāśikā*: 109]:

(1a) *yavāgv-ā*   (1b) *yavāgū-m*   *agnihotra-m*   *ju-ho-ti*
   rice-porridge-INS.SG   rice-porridge-ACC.SG fire God-ACC.SG sacrifice-PRS.3.SGC

The translation - suggested by us - may be something like this: 'He (1a) offers sacrifice by porridge / (1b) offers porridge [? as] sacrifice to God of Fire'

The semantically equivalent Russian verb for Sanskrit *hu-* is *zhertvovat'*, and its Patient may also be expressed by either accusative or instrumental, but the choice between varying cases is well determined semantically: the accusative is used when the meaning is "to sacrifice willingly, to gladly present something to somebody", but with the meaning "regretfully / under one's pressure to sacrifice something / to give up of something dear" the instrumental is to be chosen. Cannot this refer to Vedic as well ?

In sūtra **2.3.22** Pāṇini states that Goal in verbs of the semantic field 'recognition, acknowledgement'(*saṃjñā*) in addition to normal accusative may be optionally marked by instrumental (by the 3rd triplet of inflections) [besides being regularly marked by]: **saṃjño 'nyatasyām karmaṇi** . The data provided *by 'Kāśikā'*, allows us to present the following pair of illustrative samples for consideration:

(2a) *pitar-aṃ /*   (2b) *pitr-ā*   *saṃjā-nī-te*
   father-ACC.SG /   father-INS.SG   recognize-PRES-3.SG   [*Kāśikā* 1952: 113]
   '[He] recognizes (2a) father / (2b) [? as] father'.

In Russian Goal of semantically equivalent verb *priznavat'* may also be expressed by either accusative or instrumental, but the resultant constructions – of (3a) and (3b) types - clearly differ in meaning:

   prizna-j-ot   (3a) *otts-a* /   (3b) *otts-om*
   recognize-PRES-3.SG   father-ACC.SG   father-INS.SG
Literally (out of context) (3a) and (3b) mean the same: '[someone] recognizes father', but the real sense of (3a) is: '[He] submits/obeys to his father', while in case of (3b) it is: '[He] considers someone as equal to his father / standing proxy for his father'. This kind of difference may also be relevant for Sanskrit samples. By sūtra **2.3.51** Pāṇini actually proclaims the equivalency of accusative and genitive as markers of the Patient (though he treats it as '**karaṇa**' ('Instrument')) of the verbs like *jñā-* when the latter is used in the meaning of 'to examine/to investigate' [Monier-Williams: 425]. Thus, (4a) and (4b) may be treated as variants:

(4a) *madhu-ø*   /   (4b) *madhu-no*   *jñā-ya-te*
   honey-ACC.SG   honey-GEN.SG   investigate-PASS-3SG

The semantic difference between the two may be stated on the basis of comparison with Russian equivalent sentences using forms of the verb *probovat'* "to investigate/to partake":

   otved-yva-et   (5a) *m'od-ø* /   (5b) *m'od-a*
   partake-PRES-3SG   honey-NOM/ACC.SG   honey-GEN.SG

While (5a) means '[Someone] partakes [the whole quantity of] honey', the meaning of (5b) is: '[Someone] partakes [a small portion of] honey'. Thus, in Russian the difference is based on 'whole – part' relation the same might be implied for OIA also.

More complicated is the case with varying accusative and genitive marking the Patient of *smṛ-/adhi-i-* 'to remember/ to recollect':

(6a) *mātar-am*   /   (6b) *māt-uḥ*   *smar-a-ti* / *adhy-e-ti*
    mother-ACC.SG   mother-GEN SG   remember-PRES-3SG
    '[He]remembers mother.'

Russian constructions (7a) and (7b) based on forms of the verb *pomnit'/ vspominat'*, explicitly demonstrate the difference:

   Vspomin-a-et   (7a) *mat'- ø*   /   (7b) *o*   *mater-i*
   Remember-PRES-3 SG   mother-ACC SG   PREP   mother-GEN.SG

The meaning of (7a) is: 'He constantly keeps in memory the whole and distinct image of his mother', while (7b) means: 'He sporadically directs his mind towards his mother's image dimly preserved in his brains'. This pattern, being the semantic deviation from the same 'whole–part' relation, may have been relevant for Sanskrit also. Other points will be analyzed in detail in my talk at the Conference.

[11]   *The Morphodynamics in Formation of Personal Pronominal Forms in the Mohanpuri Dialect Spoken across Bengal-Odisha Border* — Niladri Shekhar Dash, Linguistic Research Unit, Indian Statistical Institute, India

In this paper, we have made an attempt to present a short sketch about the unique patterns of formation of personal pronominal forms in Mohanpuri - a dialect which is used across the Bengal-Odisha border in the district of West Medinipur, West Bengal, India. The entire study is based on a large collection of language data and corroborative information which we have elicited from thirty native speakers (10 females and 20 males with NORM specification) who are the actual inhabitants at that particular geographical area for generations. In the history of this dialect, this is perhaps the first attempt which uses methods and techniques of language digitization in the act of dialect data collection and analysis which are further supported by extralinguistic data and information retrieved from the informants through direct interactive elicitation.

In non-ambiguous term it may be claimed that this is the first study on the particular dialect to show that this dialect, which is nearly at the state of extinction due to heavy influence of Bangla and Odia, still carries a lot of unique archaic features in the formation of pronominal forms through spontaneous use of Bangla stems and Odia case markers to serve the process of pronoun formation. Strikingly, the morphodynamics involved in the process of formation of such forms in this dialect is quite productive as these processes generate a large list of pronominal forms, which are neither Bangla, nor Odia, but a set of new lexical forms, which are similar in lexico-grammatical function as the pronominal forms of the influential languages but are unique in orthographic representation and morphological patterns.

The cultural traits and practices of the dialect community are mostly Odia oriented. It is noted that several local cultural practices like *nal Sankranti, thApan, raja, DherA pujA,* etc are actually the results of Odia festivals on the community. The spoken form of the dialect is largely Odia-titled, while the new generation of the speakers are sent to the primary schools where the medium of education is Bangla. In fact, all the schools in the area use modern Bangla as the medium of education. The regular localized communication

among the members of the community is carried out through the Mohanpuri dialect, although in formal situations, mostly in academic contexts, the standard Bangla is in use. The standard Bangla and standard Odia are killer languages here, which are killing the dialect through various non-linguistic exposures and pressures. The new generation of the community is gradually losing this dialect due to its limited use in restricted domains.

Close scrutiny of the lexical stock helps us to note the following features of the Mohonpuri pronominal forms:

[1] The pronominal forms are invariably inclined towards the Odia language, although the dialect is treated as a local variety of Bangla. The effect of the neighboring languages on the pronominal paradigm of the dialect is quite heavy and clearly visible.
[2] The plural pronominal forms are mostly Odia-oriented. That means, all the plural forms used in this dialect are made with Odia plural markers (*-māne*) tagged with Bangla pronominal stems. The modern Bangla plural markers (e.g., *-guli, -gulo, -der, -rā,* etc.) are never used in this dialect.
[3] No dual pronominal forms are found to be used in this dialect. Duality is expressed through plural forms only. This feature is almost the same as that of Odia and Bangla.
[4] Most of the pronominal inflections and case markers used in this dialect are obtained from Odia (e.g., *-nu, -māne,* etc).
[5] Syllabic contraction is a regular process of formation of plural pronominal forms in this dialect (e.g., *mormāne > monne, āmārmane > āmānne, tumārmane > tumānne, tormane > tonne, tārmane > tānne,* etc.). This may be considered as one of the unique features of the dialect.
[6] In Instrumental case, the pronominal forms are always followed by a postpositional form *diki* meaning "by" (e.g., *moke diki* "by me", *toke diki* "by you", *tāke diki* 'by him", etc.). This kind of example sheds new light to look into the declensional pattern of the pronouns of this dialect.
[7] In Ablative case, all pronominal forms are followed by the postposition *pāsnu* or *kotnu* "from" (e.g., *tor pāsnu* "from you", *mor kotnu* "from me", etc.). Interestingly, in this case, the pronominal form has to be in its genitive form to be used in the ablative case. These two postpositional forms are hardly used in modern Bangla and Odia.
[8] There is no honorific pronominal form for 2nd and 3rd person in this dialect. This reflects on another interesting aspect to show that many of the dialects or the regional varieties decline to make a distinction between honorific and regular forms. The regular form is normally extended for honorification.
[9] Similar to Bangla and Odia, there is no gender distinction in pronominal forms in this dialect. It uses the same forms (*tui* and *tumi*) for both masculine and feminine genders.
[10] The 2nd person has 2 lexical variations: regular forms and endearment forms. Their use is mostly person-sensitive controlled by the depth of referential closeness and relational proximity between the interactants. Although their inflectional patterns are same, the forms are different.

Contrary to the traditional linguistic observations this study tries to show how the pronominal forms, which are usually assumed to be more rigid to undergo changes, have been mostly transformed through the process of portmanteau combination of stem and inflections. This also raises a theoretical issue to substantiate the argument that morphological metamorphosis, after phonological assimilation, can manifest itself in the linguistic behaviour of the members of a dialect community but may not percolate to other domains of language use (i.e., syntax), even though such pronominal forms are frequent in use in all kinds of syntactic constructions available in the dialect.

The study undertaken here may be visualized as a part of the documentation of the dialect, which is, in real term, on the verge of extinction. From interaction with the local informants, it has been understood that the survival of this dialect is at stake due to the strong linguistic-cum-cultural impact of Bangla and Odia as

well as for some administrative policies adopted for the non-use of the dialect at primary and secondary school levels. In essence, the dialect is critically endangered. No effort has ever been made to collect data from this dialect and due to this fact, the dialect has not received its unique linguistic identity, which it deserves. Through extensive study of various properties and features of the dialect, it is possible to provide a sustainable help for the protection and preservation of this dialect. This study may be considered as a service for the protection and preservation of one of the endangered Indian dialects and its culture, which has been quite vibrant for generations before it is pulled to the state of survival crisis.

[12] *A cross-linguistic approach to sentential subjects in Kannada* — Anuradha Sudharsan, Department of Linguistics and Contemporary English, EFL University, Hyderabad, Telangana

This paper considers sentential subjects and (sentential objects) in Kannada in the light of the controversies about the subjecthood of clause-initial *that*-clauses in English and and uses Kannada data and data from several other languages to explain the marked character of initial *that*-clauses. Cross-linguistic studies have shown that sentential subjects and sentential objects exhibit asymmetry in that the former behave like DPs/NPs whereas the latter do not. Accordingly, Davis and Dubinsky(2007) and Han(2009) argue that initial *that*-clauses are DPs with a null D head as they exhibit characteristics associated with real subjects such as subject-raising, subject verb agreement, etc, and so they are case-marked, whereas clause-final *that*-clauses are CPs since they lack these characteristics. There are as many arguments against the subjecthood of *that*-clauses as there are for its subjecthood.

In Kannada, only nominalised clauses are allowed in the canonical subject position. Bare CP clauses are barred from this position but are allowed in the object position. They are however allowed in preverbal object position. Nominalisation converts a CP(and IP) clause into a DP clause with an overt D head which requires Case. Non-nominalised bare CP clauses lack an overt nominal head. Two factors account for this subject/object asymmetry. Firstly, Case/D feature is always available on finite T, whereas *v* has Case only when it has a DP object/complement. Secondly, the fact that only DP clauses can occupy case positions shows that only **an overt nominal head** is eligible for Case. Cross-linguistic data further corroborates this constraint on Case.

In Kannada, both CPs and IPs can be nominalised by attaching the pronominal suffix *-udu* to the complementizer or the finite verb directly. Complementizers with a N(nominal)feature alone can be nominalised. So the complementizer *emba* which is a deverbal adjective can be nominalised since it has N(nominal)feature, whereas the quotative comp *endu* cannot be nominalised since it is an adverbial participle and hence lacks N feature. The complementizer *emba* can alternately be used as a complement of a lexical head as in emba+DP clause, that is, a complex DP construction(CDPC). Therefore, the nominalised *embudu*-clause, the CDPC, and the gerund clause are all contained within a DP projection and hence can occur in case positions while the quotative *endu*-clause which is a non-nominalised CP clause is not licit in case positions. Consider these nominalised clauses:

(1) [$_{DP}$[$_{CP}$[$_{IP}$ nanna maganige innuu kelasa sikkilla]**emba]udu]**   nannannu kaaDuttade
        [my   son.dat yet   job   got.not Comp.udu].nom I.acc   worries.3sn
    "That my son hasn't got a job yet worries me."
(2) naanu [$_{DP}$[$_{CP}$[$_{IP}$ Saantiyu   endiguu avana kaibiDuvudilla] **emba]udu]**-annu   nambuttiini
    I.nom   Shanti.nom never   his   hand will let go.neg Comp.udu-acc believe.1s
    "I believe that Shanti will never let him down."

(3) [$_{DP}$[$_{IP}$ kaaleej huDugaru sigareT   seedu-]**vudu]**-annu namma tande Tiikisuttaare.

27

[college   boys.Nom cigarette smoke.ger]-acc   my   father criticises.3pl(Hon)
"My father criticises college boys smoking cigarette."
(My father is critical of college boys smoking cigarette)

The *embudu*-clause in (1) is in the subject position and in (2) it is in the object position. *Embudu* translates as 'the thing', 'the news', the saying', etc. The nominative case is invariably marked non-overtly in spoken Kannada, and in formal/written Kannada, it sometimes gets realized as *–u.* In (3), the (non-indicative) gerund *udu*-clause is the object of the verb *Tiikisuttaare*, 'criticises' and is marked accusative, and it is preposed to the left of the matrix clause. It is finite in its internal structure**.** The non-nominalised *endu*-clause, however, cannot occur in a case position, since it cannot be nominalised, as in (4 & 5).

(4)a* [CP [IP Nanna maganige innuu kelasa sikkilla] **endu.udu]** nannannu kaaDuttade
[my   son.dat   yet   job   got.not comp.udu] I.acc   worries.3sn
"That my son hasn't got a job yet worries me".
(5). *[CP [IP nanna magaLu   kaSTapaTTu ooduvudilla] **endu**] nannannu kaaDuttade
my daughter.nom hard   studies.neg comp] I.acc   bother.3sn
"That my daughter does not study hard bothers me."

The ungrammatical (4) shows that *endu* cannot be nominlised, and (5) shows that the bare CP clause is also not licit in the subject position of the verb *kaaDuttade,*'bothers' However, it can be the internal argument/complement of quotative verbs of *saying* and *thinking such as heeLU, '*say' or *yocisu,*'think'*, as in (6).

(6). P [IP jaan kaSTapaTTu kelasa maaDuvudilla] **endu**] naanu   tiLididdeene
John hard   work des.neg   comp] I.nom   think.1s
"I think that John does not work hard."

It cannot be the complement of nominals such as *samacara/suddi*, 'news', in a complex DP construction since these nominals need case. as shown in(7).

(7)*[CP [IP maanya pradhanamantri Narendra Modiyavaru   iidina   Haiderabaadge
Honourable   Prime Minister Narendra Modi.Hon.Nom today   Hyderabad.Dat
baruttaare]   **endu**]] samaacaaravu ellariguu tiLidide.
come.3sm Comp]] news.Nom   all.Dat   known.is
'That the Honourable Prime Minister Narendra Modi will come to Hyderabad is known to all.

The paper looks at several non-cased environments where only non-nominalised clauses are allowed and demonstrates that only an overt nominal head is eligible for case. Following this, the paper proposes a **(non-) Overt Head Constraint** which serves not only to exclude non-nominalised clauses from case positions but also to distinguish between Kannada-type of languages in which clausal nominalisation is available from the English-type of languages which lack nominalisation of (CP) clauses. This way it departs from earlier accounts such as D & D (2007) in which even a null D head is case-marked and which do not satisfactorily explain why the non-nominalised clause-initial *that*-clause is marked in character. It provides further supporting evidence for this constraint from several genetically and typologically unrelated languages in which nominalisation of CP clauses is available.

References
Davies, William.D. & Stanley Dubinsky. 2009. On the Existence(and Distribution) of Sentential Subjects. Scholar Commons, University of California,

Han, Hye Jin. 2005. A DP/NP-shell for subject CPs. In *Proceedings of the 31ˢᵗ annual meeting of the Berkeley Linguistics Society: General session and parasession on prosodic variation and change*, Rebecca T. Cover and Yuni Kim (eds.), 133-143. Berkeley: Berkeley Linguistics Society, University of California.

[13]   *The Chhintang Mundum (Ritual) Language: A Morpho-Semantic Analysis* ─ Ichchha Purna Rai, Tribhuvan University, Kathmandu, Nepal

Mundum is an oral tradition of Kirati people, a Mongoloid group of eastern part of Nepal. They speak two different registers/languages. The first is an ordinary language which is used for daily communication and the other variety of language is used for only ritual performance. So, the ritual language is also known as the *mundum* language in their native terms. The ordinary language and the *mundum* (ritual) language are not the one and the same. There are considerable differences between them. One of the most distinct features of the *mundum* (ritual) language is the structure of pairing nouns that make a ritual language distinct from an ordinary language. The term binomial that consists of pairing nouns was coined and introduced by Allen (1978) in the field of ritual language study. Gaenszle (2002, 2005) and Rai (2007) further elaborated and analyzed it. Binomials simply seem to be reduplication of nouns but so is not the true case. Binomials are completely different from reduplicated nouns to many respects. Reduplication is more productive in the sense that one linguistic category changes into another ones because of reduplication (Rai, 1984, 2005). But, binomials remain unchanged in their category and meaning. Binomials found in the *mundum* (ritual) language are the basic unit of parallelism. They make the language so poetic. So, the *mundum* (ritual) language is a poetical language. The *mundum* (ritual) language follows a certain melody in chanting. Binomials are very interesting in many respects like, structure make-up, types, morpho-semantics, etc. The morpho-semantic properties of binomials are the more important and interesting aspect. Thus, to analyze and translate such binomials into another language, especially into English, is a rather complicated task. Several techniques can be adopted to analyze the binomials. Allan (1978) divides binomials into morphological elements according to their resemblance with 'free standing words' or 'verbal roots' from the ordinary language (symbolized by capital letters: A, B, C), their status as affixes (s, t), or their being non-identifiable (a, b, c). In addition, he underlines those symbols which represent the global meaning of the expression (or an approximation of it), and separates the two limbs by a period. This article discusses the ethnolinguistic description of *mundum* (ritual) language. The ordinary language consists of SOV (NNV) but the ritual language consists of the structure of NV.nV but not NNV structure. Here, N refers to noun/pronoun and 'n' refers to unidentified marker/noun. The following examples exhibits the differences between ordinary language and ritual language. Following are some examples of morpho-semantic analysis:

1. Text: *risipchoŋ.pholokchoŋ*
          risip-choŋ.pholok-choŋ
          A   B   . C   B

2.   *tuplachoŋ.berichoŋ*
          tupla-choŋ.beri-choŋ
          A   B   .c   B

Examples of basic sentence structure of the ritual langauge: NV.nV

1. Ritual Text: *tupla-pheno.beri-pheno* [Burhahang_01.18]
    Morpheme Break: tupla   phes   -no   beri   phes   -no
    Glossing: banana.leaf stretch -NPST banana.leaf   stretch -NPST
    Free translation: *(S/he is) Spreading the tip of banana leaves (to make an altar).*

2. Ritual text: *casumta-apuĩso.chembita-apuĩso* [Burhahang_02.24-25]

Morpheme break:	casum	ta	a- puĩs	-u		chembi	ta	a- puĩs	-u
Glossing:	crops	PTCL	2- produce	-3P		money	PTCL	2- produce	-3P
Free translation:	You produce a plenty of crops and provide him/her with property.

Examples of basic sentence structure of the ordinary language: NNV

1. Text: *akka kok tʰuktukuŋ*
   Morpheme break: akka kok tʰukt-u-k-u-ŋ
   Glossing: 1sS rice cook-3P-NPST-3P-1sS
   Free translation: I eat rice.

[14]   *Indo-Aryan elements in Kanashi and Kinnauri – a key to its past?* ― Anju Saxena Department of Linguistics, Uppsala University, Sweden; Bernard Comrie, University of California, Santa Barbara; Padam Sagar, University of Gothenburg; Lars Borin, University of Gothenburg

Kanashi (xns) is a Tibeto-Burman (TB) language, spoken by a population of 1,500–2,000 in only one village – Malana (Kullu district, Himachal Pradesh, India). Malana is surrounded by Indo-Aryan (IA) speaking villages. Unfortunately there is very little published information about Kanashi: some short word-lists (Harcourt 1871; Diack 1896; Grierson 1928; Tobdan 2010); a grammatical sketch (6 pages) and two short texts (Grierson 1909); Sharma (1989); and Saxena and Borin (2013).

The focus of this presentation is on borrowing in Kanashi. Based on our own fieldwork data, we will show that a substantial portion of the Kanashi lexicon is borrowed from IA (of IA or Persian origin, since IA has a large number of Persian loanwords). IA borrowings in Kanashi exhibit fairly systematic behavior. For example, some di- and polysyllabic Kanashi noun stems end in *-aŋ*, *-iŋ* or *-as*/*-es*. There are no apparent morphophonological factors determining the distribution of *-aŋ*, *-iŋ* or *-as*/*-es*. Almost all these nouns contain identifiable IA stems. However, the final part is not part of the borrowed IA item, but exclusive to Kanashi.

A similar adaptation process of Indo-Aryan borrowings is also observed in verb formation, for example, there is a transitivizing/causative formation, where the transitive verbs contain *-j(a:)*.

Interestingly these same two processes are also found in Kinnauri (a closely related TB language spoken some 200 km away in lower/middle Kinnaur), but not in other TB languages of this region – even though they, too, have many IA borrowings. In Kinnauri, too, some IA noun stems end in *-aŋ*, *-iŋ* or *-as*/*-es*, again without any apparent morphophonological factors determing the distribution of these stem-endings. Whenever comparative data is available, we find that in almost all cases, the same IA item will take the same ending in Kanashi and Kinnauri (*-aŋ*, *-iŋ* or *-as*/*-es*).

This raises some interesting questions concerning the history of these borrowings in the two languages. In this presentation we will discuss the following features of Kanashi and Kinnauri: (i) the division of a year into months and the names of the months; (ii) nouns with a final *-es*/*-aŋ*/*-iŋ*; and (iii) the transitivizing/causative suffix *-j(a:)*. It seems that the adaptation of these IA elements in Kanashi and Kinnauri began in their common ancestral variety, before they moved to their present locations. Some preliminary observations will also be made concerning the possible location of this common variety.

References
Bailey, T. G. 1908. *The languages of the Northern Himalayas, being studied in the grammar of twenty-six Himalayan dialects*. London: Royal Asiatic Society
Diack, A.H. 1896. *The Kulu Dialect of Hindi: some notes on its grammatical* structure, *with specimens of the songs and sayings current amongst the people, and a glossary.* Lahore
Grierson, G.A. 1909. *Linguistic Survey of India, vol 3: TibetoBurman family. Part I: General introduction,specimens of the Tibetan dialects, the Himalayan dialects, and the North Assam group*. Calcutta: Government of India, Central Publication Branch.
Grierson, G.A. 1928. *Linguistic Survey of India, Vol 1, Part II: Comparative vocabulary*. Calcutta: Government of India, Central Publication Branch.
Harcourt, A.F.P. 1871. *The Himalayan districts of Kooloo, Lahoul, and Spiti.* London.
Saxena, Anju and Lars Borin. 2013. Carving Tibeto-Kanauri by its joints: Using basic vocabulary lists for genetic grouping of languages. Lars Borin and Anju Saxena (eds) *Approaches to measuring linguistic differences*, 175–198. Berlin: Mouton de Gruyter.
Sharma, D.D. 1989. *Tribal languages of Himachal Pradesh*. Delhi: Mittal Publications
Tobdan 2010. *Exploring Malana. An ancient culture hidden in the Himalayas*. New Delhi: Indus Publishing Company

[15] *Phonology/Morphology/Syntax Interfaces in Pakistani Languages* ─ Umaima Kamran, Department of Linguistics, Quaid-i-Azam University, Islamabad, Pakistan

Languages change is unstoppable phenomenon and various factors are there behind this variation. This paper is based on a research conducted to study language variation i.e. lexical variation brought about by the interfaces of Phonology, Morphology and Syntax in Pakistani languages. According to Shackle (2014) Urdu, Punjabi and Seraiki languages belong to the same language family i.e. Indo-Aryan. However, there found many morphological and lexical differences significant enough to make these languages quite different from one another. The focus of this study is to find out these lexical variations as an outcome of three types of interfaces, i.e. Phonology/Morphology, Phonology/Syntax, Morphology/Syntax. All the data has been collected from the Pakistani native speakers of the languages under study; i.e. Urdu, Punjabi, Seraiki. The analysis of the data has been carried out by first categorizing the data belonging to all three interfaces being studied, then derivations and notations (Chomsky and Halle; 1968) have been made to show the changes occurring as a result of the interfaces for all the three languages and the rules have been derived. Then a comparison of all these rules for the languages under study has been made and the resultant phenomenon of language variation has been discussed. The results of the study have shown that these linguistic interfaces play important role to cause lexical variation among Urdu, Punjabi and Saraiki. It is also concluded that among so many aspects that bring about language variation, interfaces between the components of grammar of a language is an important aspect. And presence of one pattern of interaction or one interface in one language, does not guarantee its present in all the members of that particular language family. Due to these interfaces, not only content words but function words also take different forms, new vocabulary items evolve and ultimately bringing about language variation. The present study can prove to be pretty useful not only particularly with reference to language variation but also in interaction of three main branches of linguistics namely Phonology, Morphology and Syntax.

[16] *Punjabi: One Language, Two Nations, Three Religions* ─ Sunil Kumar Bhatt, University of British Columbia, Canada

Punjabi, an ethno-linguistic group, is spread over North West of India and central east of Pakistan. It is one of the biggest ethnic groups in South Asia; the biggest in Pakistan with 45% (76 million) of the country's population and a significant number (30 million) in India. The main religious distribution of Punjabi group

is 70% Muslim (mainly in Pakistan), 18% Sikh and 11% Hindu (mainly in India). The conglomerate of Punjabi identity consists of three factors; ethno-linguistic, religious and nationality. Punjabi speakers, through their religious affiliation, define their relation to the language in diverse manners.

There are more than 100 million native speakers of Punjabi language. It is 13th most widely spoken language in the world. Punjabi is written in Perso-Arabic (Shahmukhi) script and Gurumukhi script, Devanagari is also sometimes used to write Punjabi.

In India, Punjabi is one of the 22 official languages and the official language of the state of Punjab and second official language of Delhi and Haryana state. It is medium of instruction in state schools and colleges, and a compulsory subject in the other schools in Punjab. The vibrant literary scene in Punjabi is covered by many newspapers, periodicals, TV channels and Internet websites. In other words, all the social functions of a language is fulfilled in Punjabi in India.

In Pakistan 45% of the population is Punjabi, but almost 60% can speak. The language has no official status in West Punjab or Pakistan. The demand to introduce Punjabi in schools does exist, but not vigorously supported by the vast majority of Punjabis. There are very a few irregular periodicals, but not even one daily newspaper in Punjabi. A very few contemporary writers write in Punjabi which leads to a dormant literary scene, although a little more than a century ago West Punjab was blooming with Sufi literary tradition. Educated Punjabis are literate Urdu, but not in Punjabi.

The reason behind the two such immensely diverse statuses of one language lies in its association with the religions. Punjabi is strongly associated with the Sikh identity; 60% population of Punjabi speakers in India. The religious book of Sikhs "Guru Granth Sahib" is partly written in Punjabi (archaic) with the script "Gurumukhi", modern standard script for Punjabi in India. On the other hand, Punjabi in Pakistan does not have any religious implication. The linguistic symbol of Islam "Urdu" has demeaned Punjabi form getting any kind of official status other than just being simply a provincial language.

The different diverse statuses of the same language is a reflection of identity formation process of Punjabis which is interwoven with ethnic, religious and linguistic factors. Language policies of various governments; British Raj, Independent India and Pakistan also contributed to shaping of the Punjabi identity.
This paper will deal with the different statuses of the Punjabi language in historical background, socio-linguistic arena and its reflection and development in modern day societies on both sides of the border

[17]   *Aspiration in Nepali* — Krishna Prasad Chalise, Tribhuvan University, Kathmandu, Nepal

Nepali is a four-category language with 16 plosives. The phonetic status of the voice aspirates has always been a matter of debate and they are also termed as 'breathy voiced'. This experiment studies the effect of aspiration on Preceding Vowel Duration, Closure Duration, After Closure Time and Superimposed Aspiration of the plosives as segmented in Mikuteit and Reetz (2007) in vowel-plosive-vowel sequence. Six fluent native speakers, three males and three females (21-30, 31-40 and 41-50 years), with normal speech capacity volunteered for the experiment.

The average PVD is slightly longer for aspirates (175 ms, SD=40) and slightly shorter for unaspirates (172 ms, SD=33). But a one-way ANOVA indicates that the PVD does not depend on the aspiration of a plosive $(F (1, 15) = 0.33, p=0.5741)$. The result is the same, separately, for both voiced and voiceless plosives. For voiceless aspirates the average PVD is 152 ms (SD=32) and for voiceless unaspirates the average PVD is 150 ms (SD=26) where $F (1, 7) =0.06, p=0.8135$. Similarly, for voiced aspirates the average PVD is 199 ms

(SD=32) and for voiced unaspirates the average PVD is 194 ms (SD=25) where $F_{(1, 7)} = 0.26$, p=0.6257. It suggests that PVD is independent of aspiration both in voiceless and voiced plosives. Moreover it suggest that the relation between voiceless unaspirates and voiceless aspirates is parallel to the relation between voiced unaspirates and voiced aspirates regarding the PVD.

Aspiration has significant effect on the CD of a plosive as aspirates are shorter than the unaspirates in the approximate ratio of 3:4. The average CD for the aspirates is 63 ms (SD=11) and the average CD for the unaspirates is 80 ms (SD=21). A one-way ANOVA indicates that the relationship between aspiration and closure duration is statistically very significant as $F_{(1, 15)} = 27.52$, p<0.0001. The relationship between aspiration and CD of the plosives is the same, separately, for both voiced and voiceless ones. For the voiceless aspirates, the CD is 72 ms (SD=6) and for the voiceless unaspirates CD is 98 ms (SD=13) where $F_{(1, 7)} = 31.81$, p = 0.0007. Likewise, the CD for voiced aspirates is 54 ms (SD=8) and for voiced unaspirates is 63 ms (SD=6) where $F_{(1, 7)} = 19.3$, p=0.0031. So, the facts justify that the relation between voiceless unaspirates and aspirates is parallel to the relation between voiced unaspirates and aspirates regarding the CD.

Aspiration has significant effect on ACT. The ACT of the aspirates is remarkably longer than that of the unaspirates. It is comparatively far longer in the voiceless plosives than in the voiced plosives so the comparison of the average values of the voiced and voiceless plosives will not be logical. For the voiceless aspirates, the average ACT is 69 ms (SD=20) and for the voiceless unaspirates it is 20 ms (SD=9) where $F_{(1, 7)} = 99.37$, p<0.0001. Similarly, for the voiced aspirates, the average ACT is 7 ms (SD=3.7) and for the voiced unaspirates it is 4 ms (SD=1.7) where $F_{(1, 7)} = 3.88$, p=0.0895 (which is slightly less than the required confidence level). The burst and frication period of the voiced plosives is very weak in Nepali and the voiced aspirates are produced fricatives in most of the situations. So measuring ACT in the Nepali plosives is indeed challenging. Still the relation between the voiceless aspirates and voiceless unaspirates; and voiced aspirates and voiced unaspirates have the same and parallel pattern.

Aspiration has substantial effect on the SA of a plosive. It is longer in the aspirates and shorter in the corresponding unaspirates in the approximate ration of 2:1. The average value for the voiced aspirates is 53 ms (SD=7) and for voiced unaspirates is 24 ms (SD=8) where $F_{(1, 7)} = 133.83$, p<0.0001. Similarly, the average value for the voiceless aspirates is 28 ms (SD=6) and for voiced unaspirates is 16 ms (SD=6) where $F_{(1, 7)} = 16.05$, p<0.0051.

It indicates that aspiration has remarkable effect on the SA of a plosive in both voiceless and voiced plosives. Moreover it suggests that the relation between voiced aspirates and voiced unaspirates and voiceless aspirates and voiceless unaspirates is parallel regarding their SA values.

This experiment shows that the characters that voiceless unaspirated plosives depict are completely shared by the voiceless aspirated plosives and all the features depicted by the voiced unaspirated plosives are shared by the voiced aspirated plosives, too. So the voiced aspirated plosives make a common class with their unaspirated counterparts. Similarly, the patterns of acoustic relations between the voiceless unaspirated plosives and the voiceless aspirated plosives are parallel to the patterns of acoustic relations between the voiced unaspirated plosives and the voiced aspirated plosives. The relation can be presented symbolically as: voiceless unaspirated plosive: voiceless aspirated plosive = voiced unaspirated plosive: voiced aspirated plosive.

The parallel phonetic features between the voiceless aspirated plosives and the voiced aspirated plosives with reference to their unaspirated counterparts justifies that voiced aspirated plosives are aspirates in reality but not a distinct mode of phonation as mentioned in the literature. So it is not logical to regard the voiced

aspirates as a distinct mode of phonation and term them as 'breathy voiced' but they are the combination of voicing and aspiration.

The term 'breathy voiced' is misleading because the term 'breathy' is used to refer to the breathy sonorants and vowels which are voiced. So the breathy sonorants and vowels are breathy voiced in reality. The next point to remember is that breathiness is a hold period feature of the sounds but the term 'breathy voiced' has been used based on the after release feature of the plosive and more over based on the effect of the plosive on the following vowel, in fact, which is not the part of the plosive. In reality, the breathiness in the following vowel is found in the case of voiceless aspirates, voiceless unaspirates and voiced unaspirates, too.

It is a matter of degree as in Figure 2 which can be presented in order as: voiceless unaspirate < voiced aspirate < voiceless aspirate < voiced aspirate.

So aspiration needs to be defined to accommodate the voiceless aspirates and voiced aspirates as well. If we defined aspiration as the release feature of a plosive as an extra air released with glottal and supraglottal friction causing noise, we can handle the aspiration in the four-category languages like Nepali, Hindi, etc. The release of a plosive includes transient (burst), frication (the opening period which is similar to the fricative production), and optionally aspiration (noise as a result of friction at the glottis and supraglottal region). It will maintain the parallel terms between phonetics and phonology and we should not bear the expense of another new term.

References
Mikuteit, Simon. & Reetz, Henning. 2007. Caught in the ACT: The timing of aspiration and voicing in East Bengali. *Language & Speech*, 50.2, 249-279.

[18]   *Command or request! - the degree of politeness in Odia* ― Kalyanamalini Sahoo, UMR 8163 STL (Savoirs, Textes, Langage), CNRS et Université de Lille, Lille, France; Kaustav Sahoo, Utkal University, Odisha, India

This paper studies the (in)directness of requests and commands correlating with the degree of politeness in Odia. Taking Blum-Kulka's (1989) theory on categorization of requests, this study considers direct and indirect request forms in communication and attempts to describe how indirectness contributes to the mitigation of a face-threatening act (Brown & Levinson 1987).

In Odia, request forms vary according to the rank, age, familiarity, location, difficulty of the service requested, etc. Request forms are made by means of mild hint, suggestion, slight demand form/ wanted, query etc. by using light verbs, particles, quantifier, past tense form of the verb, interrogatives, passivization, impersonalization, etc. They can be categorized as follows:

1. Imperative forms of request
2. Request in the form of statement of need or desire
3. Ingrained imperatives
4. Requests in the form of permission
5. Question directives
6. Hints

Power and social distance play a major role in the use of appropriate politeness. Requests are done through direct questions with friends or family members. Conventional indirect questions are used with requests for goods or information to the addressees of high/superior or equal status, while nonconventional indirect requests or hints are used with the addressees of high rank, and also with the requests for permission.

Commands are usually dealt with carefully, demanding the work by making the hearer feel comfortable and assured. Depending on the levels of honorificity, there are four types of command forms available in Odia (Sahoo 2013).

(1) Impolite, true command form
(2) Casual command form
(3) Polite command
(4) Honorific command form

Exploring different forms of pronouns employed in a wide range of contexts in request and command forms, this study assumes that the choice of the appropriate variant of the second person pronoun by the interlocutors indicates the correlation of the structure of language and the structure of society including a differential treatment of women and men. However, the assessment of an act as polite or impolite depends on the judgement whether the act is appropriate according to the norms in the particular community of practice, although there will be a lot of flexibility in these norms depending on the participants on the speech-act.

The study is based on by taking data from the EMILE/CIIL corpus. The results show that both direct and indirect forms of request and command forms are used frequently in Odia, and honorifics serve the purpose of indicating politeness. Moreover, in request or command, indirectness contributes to the mitigation of a face-threatening act (Brown & Levinson 1987).

References
Austin, John Langshaw (1962) *How to Do Things with Words*. Oxford: Claredon Press.
Blum-Kulka, Shoshana (1987) Indirectness and politeness in requests: Same or different? *Journal of Pragmatics* 11: 131–146.
Blum-Kulka, Shoshana; House, Juliane & Kasper, Gabriele (1989) Investigating Cross-Cultural Pragmatics: An Introductory Overview. In Shoshana Blum-Kulka, Juliane House & Gabriele Kasper (eds.), *Cross-Cultural Pragmatics: Requests and Apologies*, pp. 1–34. Norwood: Ablex.
Brown, Penelope & Levinson, Stephen C. (1987) *Politeness: Some Universals in Language Usage.* Cambridge: Cambridge University Press.
Goffman, Erving (1967) *Interactional Ritual: Essays on Face-to-face Behaviour.*. Garden City, NY: Anchor Books.
Jain, Dhanesh (1969) Verbalization of Respect in Hindi. *Anthropological Linguistics* 11: 79–97.
Kasper, Gabriele (1990) Linguistic Politeness: Current research issues. *Journal of Pragmatics* 14: 193–218.
Mills, S. (2003). *Gender and Politeness*. Cambridge: Cambridge University Press.
Sahoo, K. (2003). Linguistic and Socio-Cultural Implications of Gendered Structures in Oriya. In M. Hellinger & H. Bushman (Eds.) *An International Handbook of Gender across Languages.* V-III. P239-257. Amsterdam: Benjamin Publications.
Sahoo, K. M. (2010). *Empty Categories in Oriya*. Unpublished M.Phil dissertation, English & Foreign Languages University, Hyderabad.
Sahoo, K. (2013). 'Politeness Strategies in Odia'. In the journal *Acta Linguistica Asiatica*. Vol. 3, No. 1, 2013. P29-46.

This paper aims at using an online Hindi corpus to investigate the restrictions on the co-occurrence in Hindi of the STEM form of the main verb (V1) plus the vector *rakhnā* PUT or KEEP together with negative particles (*nahī̃*, *na*, and *mat* for imperative forms), and, using Japanese translations of Hindi short stories and a novel, to examine how similarly or differently this Hindi construction works compared to *oku*, the Japanese equivalent verb as V2.

Regarding Hindi V2s including *rakhnā*, there is an endless list of studies on special V2s in V1 + V2 concatenations, that is, the supposed *compound verbs* defined by Kellogg (1876: 187-191). Masica (1991: 326-30), Hook (1974), and other noteworthy 20th century scholars have termed such V2s *intensifiers, operators, explicators,* or *vectors*. The list mainly includes GO, GIVE, TAKE, FALL, PUT, etc. All of these V2s express 'manner-specification'.

Especially regarding *rakhnā* in Hindi, Snell (2010: 279) points out that the basic sense of 'to keep, maintain' can imply a firmness of action, or one whose results or implications might last over time. Following are illustrative examples of Hindi *rakhnā* (1a) and its Japanese translated equivalent verb *oku* (1b), from *Idgah*, a short story written by Premchand and translated by Matsuoka (1990: 101).

(1) a. *isīlie badmāś ne   apne paise   bacā   rakhe   the.*
       so   villain   ERG own money save.STEM PUT.PFV COP.PST
    b. *dakara aitsu=wa jibun=no okane=o   nokoshi-t(e)   oita   n(o)   da.*
       so he=TOP   self=GEN money=ACC save.-*te* form[1]   PUT.PFV GEN COP.PRS
       'So the villain (=Hamid) saved up his money (for the tongs).'

However, Snell (ibid.) does not clearly specify how *rakhnā* co-occurs with a negative particle, although he does do so regarding the often-used *jānā* GO, *denā* GIVE, and *lenā* TAKE. Jagannathan (1981: 268-9) explains that *rakhnā* as a V2 denotes a 'stative' mood and is used in a resultative construction instead of a perfective form + (perfective copula) + copula, yet he does not mention the co-occurrence of the V2 with a negative particle. It seems that only Liperovskiĭ (1984: 182-1) points out a certain limitation in V1 + V2 with negative particles. He also provides an illustrative example with *rakhnā* and a negative particle, as follows:

(2) *mai̓=ne koī ānāthālay nahī̃ khol   rakhā   hai!*
     I=ERG any orphanage NEG open.STEM PUT.PFV COP.PRS
   'I am not running an orphanage!'

Example (2) is an exclamatory sentence, not a declarative sentence. Liperovskiĭ himself has claimed that this kind of limitation occurs in utterances expressing apprehension, surprise, denial of a supposed possibility, rhetorical question, etc. As he explains regarding the example, it renders 'complete denial which is in the nature of assurance'. This is because the sentence is an exclamatory one. The studies I have performed on *jānā, denā*, and *lenā* and even on the Japanese *shimau* PUT AWAY, which functions similarly to the Hindi verbs as the V2, essentially prove Liperovskiĭ's (and even Jagannathan's) claims, especially on the following points: negative particles can co-occur with the V2s in exclamatory, interrogative, or some specific imperative sentences; there seem to be no restrictions on using the V2s with a negative particle in

---

[1] This is a conjunctive non-finite form in Japanese.

adverbial clauses such as conditional, subjunctive, or adjectival clauses or noun clauses; a negative particle does not negate an affirmative proposition, which would be sentential negation, but rather negates a part of the proposition, which is a partial or constituent negation. Therefore, it can be said that Example (2) is possible, since the sentence is not only exclamatory but also of a constituent negation triggered by the word *koi*.

With all of this in mind, I examined the circumstances under which V1 + PUT with a negative particle: *naht̃*, *na*, *mat* in Hindi and *-nai* (its allomorphs included) in Japanese really occurs in Web corpora. In particular, I have checked for the same situation with two patterns (P1: NEG + V1 + PUT [*rakhnā*]) and (P2: V1 + NEG + PUT [*rakhnā*]).

The main findings of this study are:
1. The tendency towards the co-occurrence of *rakhnā* with a negative particle and this combination's behavior in the context of pragmatics is quite similar to that of *jānā* GO, *denā* GIVE, and *lenā* TAKE, as shown in declarative sentences in the indicative mood in tables 1, 2 and 3 below. However, in BCCWJ, a Japanese corpus, for example, the number of Japanese *shite oku* 'do PUT' is 500 and the number of combinations with a negative suffix was only 15, all these not declarative sentences in the indicative mood.
2. In most of the indicative sentences in Hindi, *koi* (or *kisī*) has shown up along with a negative particle more than with a particle such as *to*, *hī*, *bhī*, which occurred in the cases of GO, GIVE and TAKE. However, this still means that the negative particle does not negate an affirmative proposition or verbal predicate, but rather negates part of the proposition (i.e., a constituent negation), as in Example (2). I have found some exceptions, such as Example (3) - however, these seem to be used to express, e.g., a 'stative' or a kind of resultative mood, instead of a simple perfective form, such as *lī hai*, for example. Incidentally, the Japanese *-te aru*, which renders a resultative, can be used in this case.

(3) *maleśiyan eyarlāiṃ ne   yah sevā   nahī̃ le   rakhī   hai   lekin…*
    Malasian Airline   ERG this service   NEG take.STEM   PUT.PFV   COP.PRS   but
    'Malasian Airline has not taken the service but…'
    http://www.bbc.co.uk/hindi/international/2014/03/140314_malaysian_plane_search_indian_ocean_ar

3. Most of the V1s frequently used in the Hindi corpus are similar to those found in a Japanese corpus - such as 'do', 'leave', 'say/tell', 'save', 'see/look', 'think', 'stop', 'hear/listen', etc.

TABLE 1 TYPE OF SENTENCES

	P1	P2
Exclamatory	0	4
Interrogative	9	9
Declarative	121	54
Imperative	1	2
Total	131	69

Table 2 Mood

	P1	P2
Indicative	113	45
Subjunctive	17	22
Imperative (infinitive usage included)	1	2
Total	131	69

TABLE 3 DECLARATIVE SENTENCES

	P1	P2
Indicative	104	33
Subjunctive	17	21
Total	121	54

Source: Data compiled from the *Corpus of Spoken Hindi*

References

Bhatia, Tej K. (1995) *Negation in South Asian Languages*. Syracuse: Indian Institute of Language Studies.

Hook, P.E. (1974) *The Compound Verb in Hindi*. Michigan: University of Michigan, Center for South and Southeast Asian Studies.

Jagannaathan, V. R. (1981) *Prayog aur prayog.* Dillii: Oxford University Press.

Liperovskiĭ, Vladimir P. (1984) *Glagol v iazyke khindi (Hindi language – Verb)*. Moscow: Institut vostokovedeniĩa (Akademiĩa nauk SSSR).

Masica, Colin. P. (1976) *Defining a Linguistic Area: South Asia*. Chicago: University of Chicago Press.

―― (1991) *The Indo-Aryan Languages*. Cambridge: Cambridge University Press.

Matsuoka, Tamaki. (1990). Īdgāha, Teiji Sakata (ed.), *Genkan no yoru: Premchand tampen shū*. Tokyo: Nihon Asia Bungaku kyōkai, pp.83-108.

National Institute for Japanese Language and Linguistics, Lago Institute of Language. (2012-2018) NINJAL-LWP for BCCWJ [Software]. Available at http://nlb.ninjal.ac.jp/.

Nishioka, Miki, Lago Language Institute. (2016-2018) Corpus of Spoken Hindi (COSH) and COSH Conc [Software]. Available from http://www.cosh.site.

Premchand, Munshi. (1956) 'Idgāh', Premcaṃd kī sarvaśreṣṭh kahāniyāṁ. Banāras: Sarasvatī pres, pp.11-26.

—— (1956) 'Idgāh' (English translation), translated by Kushwant Singh, available at: https://archive.org/stream/Idgah-English-Premchand/idgah_djvu.txt, (Accessed: 25 Dec 2018).

Snell, Rupert and Weightman, Simon. (2010) *Complete Hindi: A Teach Yourself Guide*. McGraw-Hill.

[20] *Documentation of Endangered and Low Resource Languages of Pakistan: Towards Building Infrastructure and Capacity* — Sadaf Munshi, Associate Professor and Chair, Department of Linguistics, University of North Texas

An important cornerstone of advancing scientific knowledge about the world's estimated 7,000 languages is the tremendous variation between even the language families represented in that number. Roughly half of these languages are endangered or are at risk of extinction (see Lewis & Simons 2010, Austin & Sullabank 2011, 2014). The great variety of these languages represents a vast, largely unmapped terrain on which linguists, anthropologists, and cognitive scientists can chart the full capabilities and limits of the human mind. Documentation work in the areas of increased political activity and instability, such as Pakistan, has hardly even begun. A country with rich linguistic diversity, there are serious challenges for linguists interested in working in this country. The situation is especially grim not only in the case of highly endangered languages, such as Mankiyali and Bateri in Pakistan – two undocumented Dardic languages, but also of languages with significantly large number of speakers, such as Brahui and even Punjabi. Except for a handful of languages such as Urdu and Sindhi, few languages have resources to ensure lasting records towards preservation and revitalization (see Decker et al 1992, Anjum & Rehman 2015, Bashir 2003, Anjum 2016, O'leary et al 2016, Hock & Bashir 2017 among others).

Owing to various roadblocks, which range from getting visas to being able to travel to regions with restricted access, besides security concerns in certain areas, any attempts to conduct documentation work by foreigner are time-consuming, stressful and delay the achievement of proposed outcomes. With little institutional support and dearth/absence of trained documentary linguists, the task of language documentation becomes difficult even for the locals who are neither trained nor equipped to conduct the task. As such, there is an increasing need to pursue a research, training and capacity building effort that can address the problem of endangered and low resource languages in the region more widely and effectively (see Brooks 2015). There is a need to improve the existing resources and methodological frameworks for long-term objectives so that languages that are in critical need of documentation are documented by trained scholars and linguists before they fall out of use. Because Pakistan exhibits remarkable linguistic diversity, it is timely to collect and analyze data, especially given the level of endangerment. However, any new documentation projects led, conducted, and/or sponsored by foreign institutions or organizations must include intensive training workshops for native speaker consultants, students in local universities and personnel from various institutions in Pakistan to pass on the legacy and handover the responsibility of documentation and preservation to the locals for the posterity. The role of the outside linguists is paramount in case of situations such as languages of Burushaski and many more. The linguists must consider how the local academic community is to be served during the design and implementation stages of workshops. While students are eager to document languages, they are lacking basic skills and training in documentary linguistic methods. Training opens doors for them to become more efficient and deeply involved in documentation work.

This talk will give an overview of a documentation project launched by the author in collaboration with local institutions in Pakistan. The idea is to bring together native speakers, language activists, local linguists and scholars from various regions of the country on a single platform and offer intensive training in the key aspects of language documentation including use of tools and technology, methods in analyzing languages, topics on ethics in data collection and data dissemination, archiving and preservation. Giving a progress report of this project, I will focus on the key aspects of the project and deliberate upon how the major

objectives of this ongoing effort can be achieved using the best recommendations (see Himmelmann 1998 and 2003, Ashmore 2008, Grenoble 2012)

References

Anjum, Uzma. (2016). *Language shift and the speech community: A sociolinguistic study of Tarawara community in Bandi Shungli.* Unpublished doctoral dissertation submitted to the National University of Modern Languages, Islamabad, Pakistan.

Anjum, Uzma and Rehman, Khawaja A. (2015). A First Look at Mankiyali Language: An Endangered Language. In *Journal of Asian Civilizations,* 39, 1: 177-190.

Austin, Peter K and Julia Sullabank (2011). (eds.) *The Cambridge Handbook of Endangered Languages.* Cambridge, UK: Cambridge University Press.

Austin, Peter K and Julia Sullabank (2014). (eds.) *Endangered Languages: Beliefs and Ideologies in Language Documentation and Revitalization.* Oxford, UK: Oxford University Press.

Ashmore, Louise. (2008). The role of digital video in language documentation. In Peter K. Austin (ed.) *Language Documentation and Description,* vol. 5, London. SOAS. pp. 77-102.

Available at: http://www.elpublishing.org/docs/1/05/ldd05_05.pdf

Bashir, Elena. (2003). Dardic. In Cardona and Jain (eds.) *The Indo-Aryan Languages.* Pp.818-894.

Brooks, Joseph D. (2015). On Training in Language Documentation and Capacity Building in Papua New Guinea: A Response to Bird et al. In *Language Documentation and Conservation.* vol. 9. Pp.1-9.

Decker, Sandra J.; Hallberg, Daniel G., and Rensch, Calvic R. (eds.). (1992). *Languages of Kohistan.* Sociolinguistic Survey of Northern Pakistan.

Grenoble, Lenore A and N Louanna Furbee (2012). (eds.) *Language Documentation: Practice and Values.* Amsterdam/Philadelphia: John Benjamins Publishing Company.

Hallberg, Daniel G. (1992). Bateri. In Decker et al (eds.) *Languages of Kohistan.* Sociolinguistic Survey of Northern Pakistan. Vol. 1. Pp.133-141 (Series editor: Clare F O'Leary).

Himmelmann, Nikolaus P. (1998). Documentary and Descriptive Linguistics. *Linguistics 36,* 161-195.

Himmelmann, Nikolaus P. (2002). Documentary and Descriptive Linguistics (full version). In Osamu Sakiyama and Fubito Endo (eds.) (2002). *Lectures on Endangered Languages* 5, 37-83 (Endangered Languages of the Pacific Rim, Kyoto, 2002).

Hock, Hans & Elena Bashir (eds.). 2017. *The Languages and Linguistics of South Asia: A Comprehensive Guide.* Berlin and Boston: de Gruyter.

Lewis, M. P., & Simons, G. F. (2010). Assessing endangerment: expanding Fishman's GIDS. Revue roumaine de linguistique. Retrieved from http: //www.ethnologue.com/.

Liljegren, Henrick. (2008). *Towards a Grammatical Description of Palula*, (Unpublished PhD thesis), Stockholm: Stockholm University.

Liljegren, Henrick (2017). 'Profiling Indo-Aryan in the Hindukush Karakoram: A preliminary study of micro-typological patterns'. JSALL 2017; 4(1): 107–156. De Gruyter Mouton.

Munshi, Sadaf (2016). *Burushaski Language Resource,* a digital collection of Burushaski oral literature. Available at URL https://digital.library.unt.edu/explore/collections/BURUS/

O'leary, F, Rensch, C. R., Decker, S. J., & Hallberg, D. (1992). *Sociolinguistic Survey of Northern Pakistan*. National Institute of Pakistan Studies: Islamabad.

Simons, Gary F. and Charles D. Fennig (eds.). 2017. Languages of Pakistan. In *Ethnologue: languages of the World, 20th Edition*.Dallas, Texas. SIL International. Retrieved from http: //www.ethnologue.com/. Pp. 59.

[21]   *A Sociolinguistic Study of Pyangaun Newar of Nepal* ─ Brianne Smith, Language Surveyor Specialist, SIL International

To study the village of Pyangaun in the Kathmandu Valley is to study a language situation rare to Nepal. A significant number of Nepal's minority languages, particularly those outside of the remote mountainous regions, are undergoing language shift to the dominant language of Nepali. Defying this trend, the speech

variety of Newar spoken in the Pyangaun village continues to be used as a dominant language by every generation.

The Newar language (Tibeto-Buman) presents a complex linguistic situation within Nepal. The Newar people were the first to settle in the Kathmandu Valley and today Newar communities can be found across the country. There are multiple speech varieties of Newar, with the variety spoken in central Kathmandu being used as the educational standard in Newar schools. Documentation of some varieties has been conducted by such linguists as Austin Hale in his work in Kathmandu and Patan Newar (2006), Carol Genetti in her work in Dolakha Newar (2007), and works by numerous linguists of Nepal such as Kamal P. Malla (1985), Tej R. Kansakar (2011), and Omkareshwor Shrestha (2010). However, the variety of Newar spoken exclusively in the village of Pyangaun has seen very little mention in linguistic scholarship. George van Driem (2001) makes mention of Pyangaun in so far as to posit that the Newar spoken in Pyangaun belongs to the Patan group. The most extensive work regarding Pyangaun was undertaken by Gerard Toffin (1977, 1981) as an ethnographic, rather than linguistic, study.

Pyangaun Village is located less than 10 kilometers south of Kathmandu. It is made up of about 170 households situated on a single lane spanning the length of 200 meters. The western border is made up of corn and rice fields and the eastern boundary meets a major bus stop. Pyangaun was historically mono-ethnic and self-contained. Despite the modern trend towards greater connectivity with the wider Nepali community, Pyangaun residents remain closely aligned to their own language and culture.

This paper serves as an initial sociolinguistic survey of the Newar variety spoken in Pyangaun. The data we present here is based on two phases of fieldwork, and offers updates regarding the current patterns of language use by Pyangaun residents, the linguistic similarity between Pyangaun and other varieties of Newar, and the ethnolinguistic relationship of these varieties as perceived by speakers in Pyangaun.

Data collected through individual interviews, community discussions, and observation have led us to conclude that Pyangaun Newar remains the primary language for all generations in almost every domain within Pyangaun. Residents restrict their use of Nepal to specific domains – namely the educational domain, while physically outside the village, or while speaking on the phone to someone outside Pyangaun. This diglossia between the use of Pyangaun Newar and other more dominant languages is rare within Nepal, and indicates that the language is likely to be used by future generations.

Analysis of wordlists has shown Pyangaun to be 56% lexically similar to Kathmandu Newar, with similar results when compared to other varieties of Newar. This suggests that these varieties are not mutually intelligible, a conclusion supported by the opinions gathered through interviews. While speakers stated that their mother tongue is related to other varieties of Newar, it is the view of the community that theirs is a distinct language that is spoken solely within their village. These data, taken together, lead to the conclusion that the speech variety of Pyangaun is mutually unintelligible with any other variety of Newar.

References

Driem, George van. 2001. *Languages of the Himalayas Volume Two*. Leiden: Brill.

Genetti, Carol. 2007. *A grammar of Dolakha Newar*. Berlin: Mouton de Gruter.

Hale, Austin; and Shrestha, Kedār P. 2006. *Newār (Nepāl Bhāsā)*. Muenchen: LINCOM EUROPA.

Kansakar, Tej R. 2011. A Sociolinguistic Survey of Newar/Nepal Bhasa. Paper submitted to Linguistic Survey of Nepal (LinSuN). Tribhuvan University, Kathmandu, Nepal.

Malla, Kamal P. 1985. The Newari Language: A Working Outline. Institute for the Study of Languages and Cultures of Asia and Africa: Monumenta Serindica No. 14.

Shrestha, Omkareshwor. 2010. *A grammar of Pahari*. Ph.D. diss, Tribhuvan University Kathmandu.

Toffin, Gérard. 1977. *Pyangaon, une communauté Newar de la valée de Kathmandou*. Paris: Editions du Centre national de la recherche scientique.

Toffin, Gérard. 1981. "L'Organisation sociale des Pahari (ou Pahi), population du Centre Népal". *L'Homme, 1981, tome 21 n°2.*: 39-68.

[22] *Derivational predicates in Thulung* — Aimée Lahaussois, Histoire des théories linguistiques, CNRS & Université Paris Diderot

Like other Kiranti languages, Thulung, spoken in Eastern Nepal by some two thousand people, is known for its complex verbal morphology: transitive verbs index two arguments, through verbal suffixes; in addition to these, there is a rich set of derivational suffixes that are used to variously express associated motion, valence changes, aspect and Aktionsart. This is a phenomenon that has been described for other Kiranti languages ((Bickel 1996), (van Driem 1987), (van Driem 1993), (Ebert 1994)) as well as for Tibeto-Burman languages further afield, such as Tani (Post 2010). In the case of Thulung, these suffixes occupy the greyed slots in the verb template in figure 1.

prefix	root	-person -INF	Associated motion/ orientation	valency changing	Aspect/ Aktionsart	Aspect	- person/number (+tense) -infinitive -converb	-mood
NEG mi/ me		copy inflectional material	-bal	-beʈ (causative) -siʈ (reflexive) -saʈ (applicative)	-thʌʈ (durative) -sok (completive + 'away') -le (liminal) -dzəl (completive + 'set')	-thal (habitual)	indexation markers (in PST mostly portmanteaux)	OPT -nʉ (NB sometimes cooccurs with indexation; sometimes directly on root) IRR -wa/-ja
							INF -mu CVB -sa CVB (manner) -to	

Figure 1. Verb template for Thulung, with derivational suffixes in greyed cells

The topic of my talk will be these derivational suffixes, one of which is seen (bolded) in example (1):

(1) sʉ:-ka   be-ŋ-**sa**-ŋri
    who-ERG   do-3SG>1SG.copy-**APPL**-3SG>1SG.PST
    Who did this for me?

The verb complex in (1) is made up of several morphemes: the main verb *be* ('do'), a partial 'copy' of the inflection marker, an applicative suffix *sa*, and the inflection marker for a 3SG agent acting on a 1SG patient in the past.
The copy inflection marker *-ŋ*, which is the initial phoneme of the full inflection marker, is evidence that this type derivational predicate was originally a serial verb construction, with each verb bearing full inflectional indexes, the inflection on the first verb later being reduced once the second verb was

grammaticalized into a derivational suffix. The synchronic result is a case of multiple exponence, although interestingly, the copy inflection only appears with certain argument combinations, dictated by the morphophonology of the main verb stem.

An interesting challenge in the description of derivational suffixes such as these is determining their precise semantic contribution: for those affecting valence, the contribution has clear syntactic effects, but for other types of derivation (aspect, Aktionsart, associated motion), speakers are quite clear that these suffixes can be omitted without any loss of grammaticality (even though the resulting predicate will be less colloquial).

In this presentation, I shall lay out the morphology of predicate derivations in Thulung, placing it in the context of other Kiranti languages. I will then discuss the semantics of the various derivational suffixes and their interactions and cooccurrences, detailing the complexity of assigning them clear aspect/Aktionsart labels, given that the examples in my corpus cover the spectrum of derivational to fully lexicalized. The variety of labels used by different linguists constitutes a challenge in getting a clear sense of how this type of derivational process compares across Kiranti languages, and this presentation is a step towards understanding the variety within the subgroup.

References
Bickel, Balthasar. 1996. *Aspect, Mood, and Time in Belhare*. Arbeiten Des Seminars Für Allgemeine Sprachwissenschaft 15. Zürich: Universität Zürich.
Driem, George L. van. 1987. *A Grammar of Limbu*. Mouton Grammar Library 4. Berlin, New York, Amsterdam: Mouton de Gruyter.
Driem, George L. van.. 1993. *A Grammar of Dumi*. Mouton Grammar Library 10. Berlin & New York: Mouton de Gruyter.
Ebert, Karen. 1994. The Structure of Kiranti Languages. Arbeiten Des Seminars Für Allgemeine Sprachwissenschaft 13. Zürich: Universität Zürich.
Post, Mark. 2010. "Predicate Derivations in the Tani Languages: Root, Suffix, Both or Neither?" In *North East Indian Linguistics*, edited by Mark Post and Stephen Morey, 175–97. New Delhi, India: Cambridge University Press India.

[23]   *A Phonetic Study of Hindko Nasal Stop Sounds* ─ Muhammad Nawaz, COMSATS University, Islamabad, Pakistan & Ayaz Afsar, International Islamic University, Islamabad

This study aims to describe Hindko nasal stops spoken in the Tanawal region of Mansehra, Pakistan. Hindko, one of the ancient languages of sub-continent, is the second most widely spoken language of Khyber Pakhtunkhwa (KP) province. This was the first experimental study of the region which identified the nasal stops on the basis of minimal pairs followed by parallel distribution and voicing features. Then, the identified nasal sounds were further verified by spectrographic analysis, and statistical measurement using a computer software 'PRATT'. It was found that Hindko has four nasal stops, bilabial /m/, alveolar /n/, retroflex /ɳ/ and velar /ŋ/. The first two nasals occur at three position of a word while the latter two nasals get the position at word medial and final positions. The recording for the acoustic analysis was carried out in the form of /ama/, /ana/, /aɳa/ and /aŋa/. In addition to the spectrographic analysis, the ANOVA results also show significant difference among each formant of the four nasal consonants as the p-value is less than 0.01. Then, the Least Significant Difference (LSD) tests also examined the nasal consonantal differences within pairs. The findings show F2 of the bilabial nasal /m/ has visible frequency on the spectrograms; the alveolar nasal /n/ F2 and F3 have higher frequencies than those of the neighbouring segment formants, and the retroflex /ɳ/, having the highest F1 mean value, is the most sonorous sound among the nasals. The results also reveal that F2 and F3 frequency means values of the retroflex /ɳ/ get decreased than that of the

front nasal alveolar /n/. Similarly, F1 and F2 frequency mean values of the back /ŋ/ sound show more decrease than that of the front retroflex /ɳ/. These results contradict to the traditional notion about nasal properties that back nasal frequency increases due to the decrease of air.

References
Awan, E. B. (2004). *Hindko sautiyat*. Peshawar: Gandhara Hindko Board.
Cruttenden, A. (2001). *Gimson's pronunciation of English* (6ᵗʰ ed.). London: Arnold.
Davenport, M., & Hannahs, S.J. (2010). *Phonetics and phonology* (3ʳᵈ ed.). London: Hodder.
Hall, T. A. (1997). *The phonology of coronals* (Vol. 149). Amsterdam: John Benjamins.
Hayward, K. (2000). *Experimental phonetics*. London: Longman.
Hussain, S. (n.d). Letter-to-sound conversion for Urdu text-to-speech system. Lahore, Pakistan:*Center for Research in Urdu Language Processing*.
Karnahi, M. K. (2007). *Pahari aur Urdu, aik taqabli jaaezah*. Isalamabad, Pakistan: National Language Authority.
Ladefoged, P. (2001). *Vowels and consonants: An introduction to sounds of languages. Malden, MA: Blackwell.*
Ladefoged, P. (2003). *Phonetic data analysis: An introduction to fieldwork and instrumental techniques*. Malden, MA: Blackwell.
Nawaz, M. (2014). *A descriptive study of segmental and selected suprasegmenatal features of Hindko dialect spoken in Tanawal, Hazara*. Unpublished PhD thesis. International Islamic University, Islamabad, Pakistan.
Nawaz, M. & Afsar, A. (2018). A descriptive study of Hindko segmental study. *Kashmir Journal of Language Research*. 21 *(1)*, 87-95.
Yavas, M. (2006). *Applied English phonology.* Oxford: Blackwell.

[24]   *Word stress in Saraiki* ― Firdos Atta, Lasbela Univeristy of Agriculture Water and Marnie Sciences, Uthal , Pakistan; Jeroen Van de Weijer, Shenzhen University, Shenzhen, China

This study presents an Optimality-Theoretic analysis of Saraiki word stress, an Indo-Aryan language spoken in Pakistan. Previously undescribed, this study presents a first exploration of primary word stress. Words in Saraiki are mostly short (underived words have up to three syllables, ɓʊ.ˋɦɑ.ri "broom" L (ˋL L)), so secondary stress plays no role here. Saraiki stress is quantity-sensitive, so a distinction must be made between short and long vowels, and light and heavy syllables. For instances,

a. Disyllabic words with CV.CV

pɑ.lɑ 'cold'
pʰɑ.lɑ 'door'
kʰɑ.lɑ 'ford'

b. Disyllabic words with VCCCV or VVCV.

utʰ.tʰi 'wake up'
us.t̪ri 'clever'
it̪.lɑ 'so much'

c. Disyllabic words with CVCVVC or CVCCVVC

pʰə.loo <ɽ> 'explore'
mə.roo <ɽ> 'twist'
sək.roo <ɽ>'crispy'
mʊr.ɖɑɑ <r>'dead'

44

In Saraiki, open syllables are always considered as light (i.e. have one mora), whereas closed syllables may be heavy or light subject depending on the language: in some languages these count as heavy (two moras), in other languages they count as light (one mora). Languages in which they are heavy are said to have "weight by position". However, in Saraiki, closed syllable are counted as light only at word final position;

pək.ke <ʈ> 'seize' (`H L)

A metrical foot can consist of one heavy syllable, two light syllables or one light and one heavy syllable as given below:

mə.`roo <ʈ> 'twist'  L (`H)
`pɑ.lɑ 'cold' (`L L)
`us.ʈri 'clever'(`H L)

While in case of two heavy syllables "H H" in Saraiki, stress falls on that heavy syllable having long vowel as peak;
sək.`roo <ʈ> 'crispy'  H (`H)

Footing starts from right to left in prosodic words. The last consonant in Saraiki words is extrametrical (mentioned earlier). These generalizations are best captured by a number of Optimality constraints, which can be ranked as follows:

*3μ-σ>>All-FT–R>>FT.BIN>>FT-FORMtrochee>>*FINAL-C-μ>>*LONG-Vunstressed>>WSP >>PARSE-SYL>>WBP

This constraint hierarchy shows many similarities with the ranking hierarchy of English stress. The analysis of Saraiki stress is quite comparable to that of English stress except very few variations in constraint hierarchy.

[25] *Verb Morphology in Birbhum Bangla* — Srijani Mondal, Jawaharlal Nehru University; New Delhi, India

The paper focuses on the Morphological patterning of Verbs in Birbhum Bangla, categorizing verbs based on their internal complexity apart from classifying verbs on the basis of the number of arguments they take. Other than verb phrases with one verb as the main verbal element several verbs in Birbhum Bangla exist which are composed of more than one verbal element. VERB MORPHOLOGY however also throws light on Tense, Aspect, Mood [TAM] features of the Birbhum Bangla Verbs.

Birbhum Bangla is spoken in Birbhum, one of the important districts of RARH REGION in West Bengal. It is situated in the west side of west Bengal bound by Santhal Paraganas of Jharkhand State to its West and North, Murshidabad in the East and North East and Burdwan in the West.

The Research Methodology adopted for the study was the Deductive Approach. Language data were collected from the native speakers of Birbhum Bangla in the Birbhum District through Questionnaires. The method to be applied in this research is the interview method. It is the most recommended method in field studies. Questionnaires were based on the STANDARD STRUCTURE OF DESCRIPTIVE LINGUISTIC STUDIES QUESTIONNAIRE recommended by the Max Planck Institute for Evolutionary Anthropology,

Leipzig. The Informants were mainly from the age group of 10 to 70 years. Methodology discussed in Abbi [2001] has also been utilized.

Birbhum Bangla categorizes its verbs in terms of stativity very clearly. Stative verb is one which asserts that one of its arguments has a particular property. Stative verbs differ from other aspectual classes of verbs in that they have no duration and no distinguished endpoint. An Inchoative verb is a verb that describes change of state. Most Intransitive verbs which take Dative subjects belong to the category either of Stative and Inchoative. Dynamic verb is a verb that shows continued or progressive action on the part of the subject. Dynamic verbs have duration that is they occur over time.

TENSE, ASPECT AND MOOD

Tenses are those modifications of the verb, which distinguish time. Aspect is a grammatical category that expresses how an action, event or state, denoted by a verb, relates to the flow of time. Verbs inflect for tense, finiteness, subject agreement and definiteness.

References

Bauer, L. 2003. *Introducing Linguistic Morphology*. 2nd Edn. University of Edinburg. Edinburg University Press

Binnick, R.I. [Edited]. 2012. *The Oxford Handbook Of Tense and Aspect*. Oxford University Press

Blake, B. 2004. *Case*. 2nd Edn. [Ed.]. Cambridge, U.K: Cambridge University Press

Chatterji, S.K. Grierson, G.A. [Foreword]. 1926. *The Origin and Development of Bengali Language*. [Part – 1] George Allen And Unwin Ltd. Calcutta University Press.

Comrie, B. 1985. *Tense*. Cambridge Textbooks In Linguistics. Cambridge University Press

Comrie, B. 1985. *Aspect: An Introduction to the Verbal Aspect and Related Problems*. Cambridge Textbooks In Linguistics. Cambridge University Press.

[26] *A Comparative Study of Three Major Domains of Bangla Mass Media Texts Through Keyness and Overlapping of Lexical Choices* ─ Mahul Bhattacharya, LRU, ISI, Kolkata, India

The notion of keywords in corpus linguistics denotes that there are certain words in a text which play a more important role than others in understanding the subject domain and the nature of the text. Keyword analysis is the best way to compare two or more different genres of texts through a proper statistical method. The ongoing research is being carried out with a corpus of Bangla mass media texts which contains around 12 thousand sentences (tentatively one million words). The corpus is compiled in the TDIL (Technology Development for Indian Languages) project and it contains texts from different printed sources like newspaper, magazine, little magazine, leaflets, advertisements, periodicals, etc. published between 1981 and 1995 in India. The basic purpose of this study is to understand how texts belonging to a particular subject domain vary in terms of their lexical choices and how their usage overlaps from domain to domain thereby opening scope for further exploration for unsupervised domain recognition. The present study is based on three major text domains (i.e., social, cultural, and political) since these domains contain the highest amount of mass media texts indicating their referential relevance among the members of the Bangla speech community.

At first, the subject domains have been identified based on the classification of 'Genre' and 'Text Type' proposed in Biber (1993). Then the lexical frequency list has been prepared for three different domains (i.e., social, cultural, and political) so that they can be compared with each other by their lexical variation in statistical and subjective manners. Keyword analysis requires a reference corpus containing a huge amount of data to compare with one or more target corpora. Here the word list of the mother corpus (one million

corpora) is used as the reference corpus and the keyword list has been developed for each domain. The Keyword Analysis has been done with the help of WordSmith Tool (Version 6.0) which performs the log-likelihood test on the data and generates a keyness value on the basis of the p-value less than 0.000001. The study clearly shows that there are some domain-specific words in each domain based on which the subject matter of a text can be presumed. Similarly, there are certain words which are quite dicey in nature as they overlap across domains. Based on Scott's (1999) model, the named entities, function words, and words that act as 'indicators of aboutness', are taken into consideration in keyword analysis. The focus is given on both content and function words. Where the content words are more likely to be domain specific in nature, function words are prone to be overlapping across domains, the phenomenon which invokes the question about their identity as keywords. The present study tries to identify the most frequently used domain-specifying keywords from each of the three domains. Some of the domain-specifying keywords along with their keyness value are given below (Table 1).

Next, it identifies those terms that have the nature of overlapping across domains and measures how these keywords reflect their 'high keyness value' in all three domains. Further, through concordance analysis, it shows how these overlapping words can vary in terms of their syntactic and semantic information based on the contexts of their usages. It shows how context can play a vital role not only in defining the functional role of the function words in texts, but also the type of information they are supposed to reveal at the contexts of their use in the texts. Moreover, it is observed that in certain situations, the context words become polysemous thereby adopting one of the basic criteria normally assigned to content words in word sense disambiguation and discourse analysis of texts. Moreover, the combination of keyness value and concordance acts as a clue for exploring the discourse patterns of these three major texts domains.

Social Keywords	Keyness Value	Cultural Keywords	Keyness Value	Political Keywords	Keyness Value
galpa 'story'	130.77	chabi 'picture'	280.89	pulis′ 'police'	128.86
is′war 'god'	125.39	calaccitra 'movie'	196.93	bhoṭ 'vote'	95.30
ṭren 'train'	88.23	abhinay 'acting'	123.01	phā̃si 'to hang'	88.63
sāṅketik 'symbolic'	76.27	gananāṭya 'people's theatre'	101.99	sītārām 'name of a person'	72.62
bānān 'spelling'	75.47	kamiuniṣṭ 'communist'	84.45	mārkin 'American'	71.15
bidyut 'electricity'	74.84	yātrā 'regional theatre'	75.32	rājya 'state'	66.05
sūryo 'sun'	74.68	darśak 'audience'	74.92	pres 'press'	55.10
bhartuki 'subsidy'	71.18	sarbahāra 'proletarian'	65.23	rājnaitik 'politica'	53.64
cā̃d 'moon'	59.99	philm 'film'	58.01	yuddha 'war'	51.16
rugna 'sick'	49.48	sinemā 'cinema'	49.72	swādhīnatā 'independence'	48.61

Table 1: Some domain-specifying keywords along with their keyness value in Bangla News text

This is perhaps the first study on Bangla mass media texts to identify the linguistic rudiments by which further exploration can be made to design a system for automated text classification. The advantage of this analysis lies in proper identification of the linguistic factors which give language users a better insight into the method they employ in text comprehension, as well as construct a systemic frame for designing text identification strategy for language learners. The availability of huge amount of Bangla news text data can be useful for achieving accurate conclusions with a certain amount of reliability and authenticity. This kind of corpus-based analysis is quite relevant for a resource-poor language like Bangla, as no such attempt has

ever been made to understand how the structure and texture of Bangla mass media texts vary due to certain linguistic and extra-linguistic constraints that are actively operational to specific text domains. Since the language of mass media is assumed to be the most 'recent representation' of the actual use of a language, the present study is expected to show how the Bangla news texts reflect the thoughts of the society, and how they leave a strong impact on the thought process of the speech community.

REFERENCE
Baker, P. (2006) *Using Corpora in Discourse Analysis,* London: Continuum
Biber, D. (1993) Using Register Diversified Corpora for General Language Studies, *Computational Linguistics*, 19(2): 219-141.
Biber, D. (2012) Register as a Predictor of Linguistic Variation, *Corpus linguistics, and Linguistics Theory*, Berlin: Walter De Gruyter, Pp. 9-37.
Biber, D. & Conrad, S. (2009) *Register, Genre, and Style,* Cambridge: Cambridge University Press.
Dash, N.S. (2008) *Corpus Linguistics An Introduction*, New Delhi: Dorling Kindersley, Pearson Education South Asia, India.
McEnery, T. & Hardie, A. (2012) *Corpus Linguistics: Method, Theory, and Practice,* Cambridge: Cambridge University Press.
Scott, M. (1999) *WordSmith Tools Help Manual,* Oxford: Oxford University Press.

[27] *The many ways of returning to the refrain in Telugu song* ― K. V.S. Prasad, Chalmers University Gothenburg, Sweden; Miki Nishioka, Osaka University, Japan & Prasanth Kolachina, Chalmers Uniersity, Gothenburg, Sweden

A *refrain* (abbreviated *R*) is a line in a song repeated after each verse, and often used as the song's name. Returns to *R* are usually high points both melodically and lyrically. E.g., a verse ending *I feel upon my lips again* makes a smooth *lead-in* (abbreviated *L*) to the refrain *R = A taste of honey* (Scott/Marlow, 1962). We notate this *(I feel upon my lips again) A taste of honey*, and call such patterns (lead-in)refrains or *(L)R'*s. The song goes *R ... LR ... LR …*, where *L* could change verse to verse. In our examples, *R* and *(L)R* are often both full sentences. Phrases or clauses make more interesting *L'*s than interjections. A word-prefix as *L* can transform *R*.

Our **main contribution** is to point out that *(L)R* patterns are *a striking feature of Telugu (TEL) song,* remarkably various and profuse in both old and new songs, yet little remarked in the literature as far as we are aware. We give examples from the 15th c. to the 21st. In transcription, a colon marks long vowels, and *M,* nasalized ones. Retroflexion is shown by capitalization, and aspiration by *h,* also a consonant by itself. Glosses are given, some also /morpheme-wise/.

Kannada (KAN) and Tamil (TAM) share features with TEL that help make *L(R)'*s: fairly free word order, agglutinative particles, and adjectives and relative clauses preceding the noun. We give only lone KAN and TAM examples, but expect to find more when we search. Hindi (HIN) shares fewer features with TEL; perhaps therefore, we have so far looked but found few *(L)R* s in HIN.

1.From the TEL film *Bangaru Pichuka,* 1968 (song by Arudra). Nested *L'*s to set the stage:
     ((nuni)   vecca-ga: kala-gaN-Tu:)   nidura-po:
     /gentle-ADV warm-ADV dream-see-PRS.DUR   sleep(noun)-go.IMP.SG/
     We hear *nidurapo:, veccaga: kalagaNTu: nidurapo:, nuniveccaga: kalagaNTu: nidurapo:*
            "go to sleep, warmly   dreaming   go to sleep, gentle-warmly   dreaming   go to sleep"
2.Tyagaraja (18th c.), three TEL examples.   Note: 2b splits *R*, and *L* in 2c is a word prefix.
     2a. *(ni:vaDincinaTlu a:Dina na:to:)   palukave:mi   na: daivama:*

/1SG.COM speak-NEG.2SG-why 1SG.GEN god.SG-VOC/

(you-made-dance-like danced-who me-with) speak-not-you my god

"Why don't you speak (to me) my god, (who danced as you made me dance)".

2b. *(mam)me:luko: R*="wake up" but *(L)R*="rule over us"! (*mamm*="us"*, e:luko:*="rule over").

2c. *(ra:muni san)nidhi* Here *R*="treasure" but *(L)R*="Rama's presence"!

3. From the TEL film *Bahubali 2*, 2017 (song by Keeravani).

(na:) kanna: nidurincara: "(my) son, go to sleep" and

(*ciTikina veluna koNDanu mo:sina) kanna: nidurincara:* /little finger-on hill-ACC carried-REL-PTCP/

giving "son, (who carried the hill on his little finger,) go to sleep". One simple *(L)R*, one rich.

4. In HIN *Bahubali 2,* dubbed from the TEL, the corresponding lines are

(o:) ka:nha: so: ja: zara: "(O) Kanha, go to sleep" which is a very simple *(L)R*, and

luk-chup ke: tak yu:M na: mo:he: | ka:nha: so: ja: zara:, which is two independent lines:

"Don't look at me stealthily | Kanha, go to sleep". The TEL original is an *(L)R*.

5. But HIN can show true *(L)R'*s. Film *Raziya Sultan*, 1983 (song by Kaifi Azmi).

(… sar e: sha:m se:) jalta: hai badan "… from early evening, the body burns".

6. An *(L)R* in KAN film *Srinivasa Kalyana,* 1974 (song by Udayashankar).

(*Go:vinda ninninda a:nanda   hondiruva)   na:ne: bha:gyavati*

/joy.SG.AC get-be.INF-PFV.PTCP 1SG.NOM-EXCL fortunate(noun).SG.FEM/

(Govinda you-from joy got-being)   I-only fortunate-woman

"I, (who received joy from you, Govinda,) am indeed fortunate." Similar to 3, second *(L)R*.

7. TAM/TEL. From the TEL film *Pelli Kanuka,* 1960 (song by Acharya Atreya).

(ga:nam)   manasun-e: marap-incu

/song.SG.NOM mind.SG.ACC-EXCL   forgetfulness-CAUS.SG.PRS/

" makes me forget myself, (song) makes me forget myself". The TAM original (film *Kalyana Parisu*, 1959, song: Kalyanasundaram) has the same *L* (*isai*, song.SG.NOM) and similar *R*.

8-14. TEL examples, showing in tabular form some of the many roles *L* can play.

8	Annamacharya (15th c.)	*(naraka ku:pamula veDalinca) ca:lada:* (of hell pitfalls to drive away) suffices-not?	Purposive clause
9	Annamacharya	*(sumukha:na) avadha:ru raghupati* (face-to-face) listen, Raghupati	adverb
10	Annamacharya	*(aNDanunDe:) sva:mini kaNTi* (who stays as protector) the lord I saw	adjectival clause
11	Kshetrayya (17th c.)	*(mi:) aluka di:rena:* (your) sulk is-it-pacified?	genitive
12	Ramadasu (17th c.)	*(ba:pina sva:mi) e:Dunna:Do:* (the saviour) wonder where he is	nominative
13	Devulapalli, in film Malliswari (1951)	*(mabbulu musire:lo:ga: mu:ge:lo:ga:) u:ru ce:ra:li* (before clouds swarm and gather) must reach town	adverbial clause
14	Arudra, in film Muddu Bidda (1956)	*(amma:) cu:Da:lani undi* (Oh Mother) want-to-see *(ninnu:) cu:Da:lani undi* (you) want-to-see	vocative accusative

The agglutinative nature of TEL enables these *(L)R* patterns since function is captured concisely, often by one syllable. E.g., in Ex 8, *veDalu*=go*, veDalincu*=make go*, veDalinca*=to make go. In Ex 10, *...unDu* =stay, *unDe:*=one who stays. In Ex 13, *lo:ga:* = before. Adnominals and relative clauses precede the noun. *Summary:* We have described (lead-in)refrain patterns or *(L)R*'s. The return to *R* from *L* is like the return to the theme after a variation in Indian classical music: smooth, pleasing and yet surprising. We have shown the rich use TEL has made of *(L)R*'s. *Conjecture:* We expect search to find that similar *(L)R*'s are fairly usual in KAN and TAM. We are unsure what to expect in HIN.

Acknowledgements:
1. *(L)R* patterns extend the refrain. Friends have pointed out that they resemble *Srotovaha Yati [1]*, an expanding syllabic pattern, but the two are quite different phenomena.
2. We thank our friend Swati Parashar for finding Ex. 5.

Reference
[1] Indira V. Peterson, *Sanskrit in Carnatic Music: the songs of Muttusvami Dikshita*, Indo-Iranian Journal 29, pp.183-199, 1986.

[28]   *Causatives in Maring* ― Kanshouwa Susie, Jawaharlal Nehru University, New Delhi, India

Maring is a lesser known Tibeto-Burman language spoken in southeastern part of Manipur, northeast of India. This paper will describe the causatives construction found in Maring following Payne's (1997, 2006) outline. Causatives are valence increasing operation where another core argument, a causal agent (causer), is added for expressing a semantic or logical effect of causation on the non-causative verb. Causative construction comprises of the causer – the agent of the predicate of cause, and the causee – the agent of the caused event (Payne 1997: 176). So, when a transitive verb is causativized, the causer is the one acting upon the causee who is actually performing the action. Maring has both lexical and analytical causatives. In lexical causatives, the verb see (1) at non-causative structure is altered to give rise to a different form (2) when it is in causative construction, i.e. *mu* 'see' changes to *mut* 'see.CAUS'

1. əŋtu niŋsun   tʰlaini-tʰuk kəi **mu**-kʰəu   (Non-causative)
   today morning sun-out   1SG **see**-PFV
   I saw the sunrise today morning.
2. əŋtu-ri   nuwi-ne   kai-jəi   jul-ləi   ləu **mut**-pi (Causative)
   today-TOP mother-ERG 1pl-POSS village-GEN field **show**-BEN
   Today mother show our field (Mother made us see our field today).

As for analytical causative, three separate markers are used for expressing the causation process. The causative *təu* 'do' is used for indicating direct causation where the causer himself is the causee.

3. koko-ne   miŋsel-həi   **təu**-bai-kur
   koko-ERG mirror-DET **do.CAUS**-break-PRF
   Koko broke the mirror (Koko made the mirror break).

The second marker *juk* derived from *ju* 'to come down', not only gives a compelling or forceful interpretation like a command but goes beyond further to trigger more events.

4. nao-həj   cak   juk-pi- ca-lək
   child-DET food   CAUS-give-eat-IMP
   Make the child eat the food

50

The third marker *kjer* derived from *kja* 'allow or possible', gives a permissible reference or allow somebody to do something.

5. nuwi-ni   pawa-ja   cak   tʰuŋ-**kyer**
   mother-ERG   father-ACC   food   cook-**CAUS**
   Mother let father cook food.

This paper attempts to investigate the causative construction in Maring. It will be divided into two parts: the first part will describe and analyze the Maring causatives – their origin, characteristics and productivity etc. The second part will compare the causative construction of Maring vis-à-vis other neighboring Tibeto Burman languages and see if a broader typological generalization can be made of the same.

References
Bedell, George. (2012). "Causatives in Lai and Mizo"in Language in India. Vol 12:2. pp.88-99.
Dixon, R.M.W. (2012). *Basic Linguistic Theory. Further Grammatical Topics. Vol 3.* New York: Oxford University Press
Escamilla, Ramon Matthew. (2012). An Updated Typology of Causative Constructions: Form-Function Mappings in Hupa (California Athabaskan), Chungli Ao (Tibeto-Burman) and Beyond. Ph.D Thesis. University of California, Berkeley.
Joseph, U.V. (2005). "Causatives in Rabha" in *Linguistics of the Tibeto-Burman Area.* Vol. 28.2. pp.79-106
Kanshowa, Susie. (2016). "A Descriptive Grammar of Maring." Unpublished M.Phil Dissertation, Jawaharlal Nehru University, New Delhi.
Payne, Thomas E. (1997). *Describing morphosyntax: A guide for field linguists*. United Kingdom: Cambridge University Press.
Payne, Thomas E. (2006). *Exploring Language Structure: A Student's Guide.* United Kingdom: Cambridge University Press.
Vanbik, Kenneth. (2002). "Three Types of Causative Constructions in Hakha Lai" in *Linguistics of the Tibeto-Burman Area.* Vol. 25.2. pp.99-122

[29]   *Explaining Diachronic Semantic Change through prototypicality: Sanskrit to other Indian languages* — Pratik Kumar Mahant & Sanjukta Ghosh, Department of Humanistic Studies, IIT (BHU)

The paper is an attempt to describe and analyze the semantic changes of the words coming from Sanskrit to some selected modern Indo-Aryan languages as well as in some Dravidian languages. The theoretical framework which is used to classify the available senses of Sanskrit words is prototypical theory (Geeraerts 1997). This theory is based on the assumptions that prototypical categories have a family resemblance structure, i.e., like all members of the family do not share all characteristics of the family, in the same way there are some senses which are considered to be more core and clustered together whereas other senses are found in peripheral cases with some usages. There may be members whose inclusion in the category is blurred or debatable, that is why there are no necessary and sufficient conditions of being in a category. While explaining historical semantic changes through prototypical theory, Geeraerts et al (2007) said that by stressing the importance of extensional non-equality of lexical semantic structure, prototypical theory highlights that one specific word meaning may extend within a referential range and goes through modulation of the core senses. As certain senses are more a member of the family than other, they become more stable historically and the chance of retention of those senses are more in the development of the language.

Sanskrit belongs to old Indo-Aryan language. All modern Indo-Aryan languages have a rich stock of Sanskrit words. However, these words have undergone semantic changes in the course of the history of development of these languages. Often, we find that one of the many senses related to a particular word in Sanskrit has been taken in a new Indo-Aryan language. Sanskrit has influenced literary languages of Dravidian Language family too like Tamil, Telugu, Kannada and Malayalam. The same pattern of meaning change is observed in these languages also. For instance, *abhimAna* in Sanskrit has four different senses, out of which three languages Hindi, Marathi and Malayalam have taken the core sense *pride*. This sense may be considered the prototypical sense of the word. However, the sense of *abhimAna* in Bangla is an associated extension from the sense *pride* when one sulks in pity annoyance to pamper one's pride (especially with a loved one). Therefore, this is modulation of core sense. Telugu has borrowed more peripheral sense *affection*. The prototypical theory says that same marginal meaning may occur several times independently in the history of a language. This can be extended for Telugu with a borrowed marginal sense. In the second example, the meaning *indication* is taken as *hint* in Malayalam and Hindi. The meaning *pointing out* is extended as *instruction* in Telugu. Bangla primary meaning *introduction* is also an extended meaning of *hint* or *pointing out*.

	Word	Sanskrit	Hindi	Bangla	Marathi	Telugu	Malayalam
1	abhimAna	1.Pride, haughtiness, 2.self-conceit, false conception about self, 3.affection, 4.desire	pride	huff, sulk (with a loved one)	pride	(fan-like) affection	pride
2	SUcanA	Information, Suggestion, Notice, Pointing out, indication Communication (Monier William)	Information hint	Introduction	Information, notice, suggestion	Instruction, Warning, rule	Warning, hint

For Sanskrit meanings, dictionaries like Monnier Williams Sanskrit-English Dictionary, Vaman Shivram Apte Sanskrit-Hindi Dictionary have been consulted. Sanskrit WordNet has also been checked for senses and usages of the words mentioned in the abstract. Sanskrit usages have also been taken from the texts of Hitopadesha, LingapurANa, Amarkosha, AshtAdhyAyI, RAmAyana, Padyebbukhandam, ArthashAshtra etc. The native speakers of the modern Indo-Aryan and Dravidian languages have been consulted for the senses and uses of the words in their languages apart from consulting online bilingual dictionaries.

References
Apte, Vaman Shivaram. *Revised and enlarged edition of Prin. V. S. Apte's The practical Sanskrit-English dictionary.* Poona: Prasad Prakashan, 1957-1959. 3v. https://dsal.uchicago.edu/dictionaries/apte.
Cappeller, Carl. 1891. A Sanskrit-English Dictionary.
http://sanskrit-lexicon.uni-koeln.de/scans/CAEScan/2014/web/webtc/download.html
Geeraerts Dirk. 1997. *Diachronic Prototype Semantics: A Contribution to Historical Lexicology.* Clarendon Press: Oxford.
Geeraerts Dirk et al. 2007. "Lexical Variation and Change". In *Oxford Handbook of Cognitive Linguistics*. (Eds.) Geeraerts and Cuyckens. OUP.
http://andhrabharati.com/dictionary/sanskrit/index.php.
http://kjc-sv013.kjc.uni-heidelberg.de/dcs/index.php?contents=fundstellen&IDWord=22449

http://www.cfilt.iitb.ac.in/wordnet/webswn/
William Monier. 2008 revision. Sanskrit-English Dictionary. https://www.sanskrit-lexicon.uni-koeln.de/monier/
Wilson Sanskrit-English Dictionary. 2011 revision.
https://www.sanskrit-lexicon.uni-koeln.de/scans/WILScan/disp3/index.php

[30] *Acoustic Analysis of Plosives in Domaaki: A severely endangered language of Northern Pakistan* ― Zafeer Hussain, Kiani Ayesha Bibi, Dr. Abdul Qadir Khan Department of English, University of AJ&K, Muzaffarabad, Pakistan

This study is an analysis of phonemes of Domaaki, a severely endangered language of Northern Pakistan. There are hardly 18 to 20 persons who can fluently speak Domaaki. These speakers are residing in two villages of Hunza namely Mominabad and Nagar. For the present analysis, the Indo-Iranyan Swadesh wordlist was recorded from six (i.e. 3 male & 3 female) speakers. The recorded wordlists were transcribed with the assistance of a native language consultant in IPA. There were certain consonants which were apparently found contradictory to the existing literature on Domaaki.

The existing literature does not cite the presence of retroflex fricatives /ʂ/ & /ʐ/, retroflex affricates /ʈʂ/ & /ɖʐ/ and dental affricate /ts/ while these consonants are frequently found in the recorded data for present study. The data also showed the presence of dental stops /t̪ & d̪/ along with their alveolar counterparts /t, d/ whereas these alveolar stops were not reported in the previous literature.
The target words containing dental and alveolar stops were analyzed in Praat software to verify their existence by examining the acoustic features. The acoustic analysis also confirmed the presence of the said consonants and also the presence of both types of plosives in Domaaki. However, the alveolar plosives were found only in word initial position and were found to be replaced with retroflex plosives at word medial and final position. This was further analyzed through palatography of the target sounds by two native speakers. The results of palatography also confirmed the existence of dental and alveolar plosives where alveolar plosives were found only at word initial position.

[31] *Contrastive Analysis of Segmental Features of English and Urdu Phonemes* ― Ayesha Bibi, Abdul Qadir Khan, Zafeer Hussain Kiani, University of AJ&K, Pakistan

The current paper attempts to present a contrastive analysis of segmental features of English and Urdu phonemes. This study makes a contrastive analysis of English and Urdu languages at segmental levels of phonological units. The objectives of this study are to identify the similarities and differences between the segmental phonemes of English and Urdu languages and to predict learning difficulties among the Urdu ESL learners. ESL learners are usually faced with difficulties largely contributed by the features of their first languages (L1). In the course of this study, mixed-method approach was employed. 4 Urdu native speakers were recorded in a noiseless environment for the target phonemes in VCV and CVC context for target consonants and vowels respectively. The recordings were analyzed in praat software and the acoustic features of target phonemes were observed and documented. These acoustic features of Urdu were compared with English phonemes with the particular focus on differences between them. The results of the study demonstrate that although Urdu and English have some similar phonemes, the sounds do not behave the same way in the two languages. Additionally Urdu has more number of phonemes as compared to English. Differences in the phonological features between the two languages result in challenges faced by the Urdu speakers in learning English.

[32] *The Effect of Extraversion Personality Trait On Turn-Taking Behaviors During Dyadic Conversations in Hindi-Speaking People with Stuttering Disorder* — Shivangi Banerjee, JNU, New Delhi

Stuttering is an intermittent, involuntary, and a neurophysiological communication disorder. It is characterized by speech disruptions that include the part-word, single-syllable whole-word repetitions, audible prolongations and silent blocks. It afflicts about 1% of the population (Yairi & Ambrose, 1999, p. 1097). Due to the lifelong experience with stuttering, People Who Stutter (PWS) often develops a repertoire of negative emotions (Sheehan, 1970; Van Riper, 1982) associated with their speaking including shame, self-consciousness, embarrassment, guilt, humiliation, and anger. This affects their overall personality. In addition, it has also been observed that stuttering manifest its affect in the space accompanying the interactant and the PWS during conversations. To understand these two sources of communication difficulties in PWS, it is important to examine how the adverse impact of stuttering on the overall personality might plausibly influence the turn-taking behaviors during dyadic conversation in PWS.

The role of Extraversion personality trait during speech production has been fairly misunderstood in the past. This was primarily due to either inappropriate application of research designs or vague understanding about the terminology, resulting in ignoring the significance of considering Extraversion trait in applied linguistic research. People with extraversion trait are generally considered as social, talkative, assertive, energetic, and active in nature (Costa & McCrae, 1992). The significance of understanding Extraversion trait during speech production stemmed from the realization that the proposed psychological construct has been examined under different stimuli conditions Reappraisal of scientific literature indicates that people with Extraversion trait tend to be underaroused, have greater left-hemisphere activation, possess better approach towards stress and have lower anxiety levels, as compared to Introvert people. Although examining arousal activity and blood flow patterns are not the focus of this research study, stress and anxiety levels, the two sub-domains of extraversion trait, do play a significant role during speaking situations in PWS. During a conversation, PWS can predict their stuttering events ahead of actual time of speaking. Therefore, they would either refrain to speak or their stress and/or anxiety level increases while talking with those who do not stutter (PWNS) by constantly exhibiting more number of stuttering events during such speaking situations. In addition, the tendency to take appropriate turns during conversation also seems to be affected in PWS. To overcome such situations, recent research studies have indicated Extraversion personality trait as an important coping strategy with regards to communication in daily life situation for PWS. In other words, those PWS who would have better approach in managing their stress and anxiety level would be far better at handling stuttering events during speaking situations than those PWS who would struggle to manage these psychological constructs during conversations.

The current research study recruited individuals from two potential communities. While, PWS were drawn from *The Indian Stammering Association-Delhi Chapter* (TISA), the other group of individuals, PWNS were recruited from Jawaharlal Nehru University campus. In the first session, twenty individuals (20 PWS, & 9 PWNS) were asked to fill up the *Profile Forms*. These forms were also used for the purpose of screening inclusion and/or exclusion criteria of the study. Based on separate inclusion/exclusion criteria for the two groups, the researcher identified sixteen potential participants with eight participants selected from each of the two communities for the study. During the second session, the researcher collected speech samples and personality questionnaire data from all the selected participants, followed by collection of additional data related to PWS experience of stuttering using the *Stuttering Information Sheet*. To minimize the study bias, the researcher then randomly chose every fourth participant from the cohort of selected participants, resulting in picking up four participants as "Speakers". The rest of the twelve participants were considered

as "Conversational Partners (CPs)" in the study. During the third session, each of the four speakers had twelve separate conversations with each of the CPs on a given topic, generating a total of 48 conversations.

The researcher will conduct a manual transcription of the recorded conversations to determine the turn-taking behaviors of the participants. Means and standard deviations of the participant's age, and turn-taking behaviors will be generated. The raw scores of the personality questionnaire will be converted into composite and T-scores for Extraversion trait. Separate ANOVAs to determine the differences in (a) Turn-Taking Behaviors (TTBs) towards PWS & PWNS (b) TTBs towards fluent, stuttered & disfluent turns (c) Extraversion trait towards PWS & PWNS, and (d) Extraversion trait towards fluent & stuttered turns will also be conducted. Accordingly, main effects and interactions will also be performed.

To sum up, the significance of understanding Extraversion trait during conversation stemmed from the realization that the proposed psychological construct plays an integral role during social interactions and serves as an important coping strategy with regards to communication in daily life situation for PWS. Determining its possible role during conversation in PWS will help us in understanding its significance during stuttering intervention programs where communication skills, along with other speech modification techniques, are considered as important targets.

References
Costa, P. T., & McCrae, R. R. (1992). *Neo personality inventory–revised (neo-pi-r) and neo five-factor inventory (neo-ffi) professional manual*. Odessa, FL: Psychological Assessment Resources.
Sheehan, J. G. (1970). Stuttering: research and therapy. New York: New York, Harper & Row.
Van Riper, C. (1982). The nature of stuttering: Prentice-Hall, Englewood Cliffs, NJ.
Yairi, E., & Ambrose, N. G. (1999). Early Childhood Stuttering I: Persistency and Recovery Rates. *Journal of Speech, Language, and Hearing Research, 42*(5), 1097-1112.

[33]   *Nature of Phonological system in Heritage Konkani Speakers of Kerala: A study on Vowel production* ─ Reshma Jacob, JNU, New Delhi, India.

The term Heritage Language (HL) was coined in Canada (Cummins 2005). HL is any language that is spoken by a community at a place where the community is a minority. Diverse Diasporas (Tamil, Punjabi, Spanish, German, Italian, Hebrew, Arabic etc) in Canada may have led to the coinage of the term. Montrul (2013)[2] claims that "the term *heritage language* began to be used in the United States in 1990s to refer to the minority languages of immigrants." Heritage Konkani speakers (HKS) of Kerala are Gowda Saraswat Brahmins (GSB) who migrated from Goa to Kerala during 13th to 16th century (Mallaya 1994). Konkani GSBs identify themselves as Konkanis who live in Kerala and can also speak Malayalam, the majority language. It is observed that they live together as a community around a temple. Konkani is only spoken in restricted domains such as in their houses and in the community. The Majority language, Malayalam (L2), has become their primary language as it is used everywhere else (schools, colleges, hospitals, offices, business etc). They also learn English (L3) at school and use it in various domains accordingly. Thus, GSBs of Kerala have the Indo Aryan language Konkani, Dravidian language Malayalam and Germanic language English in their linguistic repertoire.

There have been various approaches to the understanding of the nature of phonological systems in developing bilinguals. Bilinguals have one enlarged phonological system, claims Swadesh (1941).

---

[2]Montrul, Silvina. "Bilingualism and the Heritage Language Speaker." *Hanbook of Bilingualism and Multilingualism*, 2nd ed., Blackwell Publishing, 2013, p. 170.

However, the most widely held claim is that bilinguals have two separate phonemic systems for their coexisting languages (Weinreich 1974). This paper analyzes the nature of phonological system in Heritage Konkanis by studying their vowel production. Such an analysis will also facilitate to know which language has the major influence on their L3. That is, whether it is the L1 or L2 that has the most influence on their L3.

Adult speakers of Heritage Konkani who are fluent in Malayalam and English will be the subjects of this study. Informants will be tested for their proficiency in Malayalam and English vocabulary. In order to understand the nature of their phonological system, their acoustic space will be analyzed for all three languages, Konkani, Malayalam and English respectively. PRAAT software will be used for the same.

References
Cummins, Jim (2005). A proposal for action: Strategies for recognizing language competence as a learning resource within the mainstream classroom. *Modern Language Journal*89: 585–91.
Lleó, C. & M. Kehoe (2002).On the interaction of phonological systems in child bilingual acquisition. *The International Journal of Bilingualism* 6 (2), pp. 233-237.
Mallaya. N. Purushothama. (1994). Saraswats in Kerala History. Cochin; Konkani Bhasha Prachar Sabha, pp. 33.
Montrul,S. (2008). Incomplete acquisition in Spanish heritage speakers: chronological age or interfaces vulnerability? *BUCLD, 32, Proceedings of the 32nd annual Boston University Conference on language development*. Ed. Harvey Chan, Heather Jacob, and Enkeleida Kapia. Somerville: Cascadilla. 299-310.
Oh, J., Au, T., & Jun, S. (2002). Benefits of childhood language experience for adult L2 learners' phonology. In *Proceedings of the 26 Annual Boston University Conference on Language Development*, vol.2, ed. B. Skarabela et al., 464-472. Somerville, MA: Cascadilla Press.
Swadesh, M. (1941). Observations of pattern impact on the phonetics of bilinguals. In Spier, Hallowell, Newman, *Language, culture, and personality: essays in memory of Edward Sapir*, pp. 59-65, Sapir memorial publication fund, Menasha.
Weinreich, U. [1974 (1953)]. *Languages in contact*. The Hague: Mouton.

[34]   *Negative sentiment patterns in Hindi* ─ Satya Dwivedi, IIT BHU, India

Sentiment Analysis or opinion mining is an NLP task in which opinions in natural languages are bucketed into three categories namely Positive, Negative and Neutral/Objective (1). The task of opinion mining gets tougher due to the creativity of human languages, and the divergence between the intent of a speaker and its extent into a natural language.

Negation in form of negative opinions is one of the most effort-taking identification tasks due to the variety of strategies used to convey the negative opinion and the scope covered by each strategy. Ranging from politeness to face threatening, there are various reasons to prefer one strategy over others to convey a negative opinion. There have been a few works for Sentiment analysis in Hindi namely SentiWordNet for Indian languages (2), A fall-back strategy for sentiment analysis in Hindi (3) and others. One work on the negation and discourse relation in Hindi reviews(4) is available, however, no work is available till date which deals particularly with negation patterns across domains.

In this paper, we argue and provide pieces of evidence to show that there can be multiple ways to convey the negative opinion in Hindi and that the scope of a strategy and the motivation behind its usage differ substantially from others. The following examples present a few such conditions:

hāusa kīpiṃga kī   suvidhā acchī nahīṃ hai.
House keeping PSP facility good not   copula

Housekeeping facility is not good here.

In this example, the speaker uses the negation as an entity to convey the negative opinion about the housekeeping of a hotel. The negation in its scope covers the whole proposition. Further, being straight forward in nature, this strategy will come under the negative face-threatening act and will cause damage to the hearer.

yahāṁ̐ kā   khāna-pāna bahuta kharcīlā   hai.
here   PSP eating   very   expensive copula.
Eating here is very expensive.

This example has an adjectival negation, where an adjective of negative traits is used to convey the negative opinion about the price of food at a hotel. Though negation as an entity is not used explicitly here, the opinion about the cost of the hotel is negative here.

keka utanī   acchī bhī   nahīṁ hai.
Cake that much   good RP   not   copula
The cake is not that much good.

The negative opinion here is based on the comparison with some early event, and the scope of negation eliminates just the equivalence of the current event with the early event. So the negative opinion here is not about the current event, but about the idea of equivalence between the two events. So, interestingly the opinion is positive here.

ise bahuta acchā khānā kahanā   to   galata hogā.
It   very   good food   claiming RP wrong would-be
Claiming it very good food would be wrong.

The strategy of negation here is face-saving as this utterance has an indirect negation. The objective of conveying negative opinion is achieved through negating a positive proposition. So, even though the opinion seems polite enough, ultimately it is negative.

Other than exploring the negative sentiment patterns present in Hindi (in use) exhaustively, we further try to formalize these patterns in rules to help sentiment analyzers do better sentiment analysis.

References
1. Pang, Bo, and Lillian Lee. "Opinion mining and sentiment analysis." Foundations and Trends® in Information Retrieval 2.1–2 (2008): 1-135.
2. Das, Amitava, and Sivaji Bandyopadhyay. "SentiWordNet for Indian languages." Proceedings of the Eighth Workshop on Asian Language Resouces. 2010.
3. Joshi, Aditya, A. R. Balamurali, and Pushpak Bhattacharyya. "A fall-back strategy for sentiment analysis in hindi: a case study." Proceedings of the 8th ICON (2010).
4. Mittal, Namita, et al. "Sentiment Analysis of Hindi Reviews based on Negation and Discourse Relation." Proceedings of the 11th Workshop on Asian Language Resources. 2013.

[35] *The quotative system of Kannaujī* — Shivam Dwivedi, IIT BHU; Sanjukta Ghosh, IIT BHU, India; Satyam Dwivedi, IIT BHU, India

Kannaujī is an Indo Aryan language, spoken mainly in the areas around mainland *Kannauj* by six million speakers (1). George Abraham Grierson lists *Kannaujī* as a western dialect of *Hindi* in his pioneer work Linguistic survey of India (2), however, *Kannaujī* reflects much structural and functional difference with *Hindi* and its sister languages. One such difference is the presence of quotatives.

Discussions on Quotatives with reference to Indian languages are not new. Kachru notifies the presence of quotatives like *iti* in *Sanskrit* in various Indian languages (3). However, there have been no claims showing the presence of quotatives in *Kannaujī* or other sister languages. The objective of this paper is to provide a detailed account of the *Kannaujī* quotative system. We present speech corpus-based pieces of evidence which show that *Kannaujī* has a very rich quotative system.

The following example recorded during one of the field work drives in *Kannauj* illustrates one of the frequent quotatives in Kannauji:

> *kahī   paisā   tai hama khūba poḍe aiṃ,   khālī biṭenā nīkī hovai*
> QUOT money by   we   very rich copula, only   bride nice be.
> S/he told me, "I am very rich financially, all I want is a good bride"

In this example, *kahī* is a gender-neutral quotative. Interestingly enough the selection of this quotative implicates that (a). The original speaker is not a part of the current discussion (b). The motivation behind this knowledge exchange is purely informational in nature, and that (c). The current speaker is not much interested in sharing the relative social status of the original speaker, due to the use of an honorific-neutral quotative. Likewise, other *Kannaujī* quotatives widely cover various linguistic aspects ranging from deictic details and honorificity to the motivation behind the knowledge exchange.

Additionally, we provide further evidence to show how a situation and motivation plays a crucial role in the selection of a quotative.

References

Registrar General, India. "Census of India 2011: provisional population totals-India data sheet." Office of the Registrar General Census Commissioner, India. Indian Census Bureau (2011).

Grierson, George Abraham, ed. Linguistic survey of India. Office of the superintendent of government printing, India, 1906.

Kachru, Yamuna. "The quotative in South Asian languages." South Asian languages analysis 1 (1979): 63-77.

[36]   *On Question Particle in Spiti* — Ojaswee Bhalla, Jawaharlal Nehru University, New Delhi, India

This paper talks about interrogative constructions in Spiti (Tibeto-Burman; SOV) and exhibits some issues raised by its data. Preliminary investigation shows that this language is of 'wh-in-situ' type and employs an overt question particle (/pa/ or /a/, attached to verbal stem in clause-final position) in their polar yes/no questions. The point of interest is that a constituent wh-question construction has both the wh-word and this question particle in it. Example:

(i) tʃi   tʃʰut   nəŋmo   i-ru   joŋg-ək-**pa**
    what 2.SG   tomorrow here-LOC   come-FUT-Q
    'Will you come tomorrow?'   [YES/NO Q]

(ii) kʰɔ **su** inok-**pa**
   3.SG who be.COP-Q
   'Who is he/she?'   [CONSTITUENT Q]

This poses a problem to Clausal Typing Hypothesis (Cheng 1997) that posits that a clause has to be typed for interrogative force with either of the two mechanisms (a wh-word or a (null/overt) Q operator of yes/no questions) being employed for it. On prima facie basis, Economy principle seems to be violated here as both of the above mechanisms are employed in this language simultaneously. Cartographic approaches (Rizzi 2001, Aboh 2011) are insufficient to explain the presence of both wh-word or Q particle, though they do provide possible landing sites for each of them post overt syntax (head of Int(errogative)P for yes/no Q operator and spec of ForceP for wh-word/phrase).But the data does not provide any argument for this framework either.

An analysis on the lines of Cable (2008) is attempted that makes a Q-particle obligatory along with a wh-word as it is this Q-particle (with an interpretable Q feature) that is the goal for C head's probe, with which it Agrees to eliminate C head's uninterpretable Q feature. Two problems are put forth to the analysis by the distribution of this particle. Firstly, there are constructions that do not take this Q particle (contrary to claims made previously about this language (Sharma 1992)) and there is no natural class of predicates that don't. Secondly, even in scope marking constructions (to get wide scope reading of an embedded wh), this question particle is found in both the matrix and embedded clause along with wh-word. Licensing of interrogative interpretation without an overt Q particle in the first case and the role of a Q particle in matrix clause of an embedded wh question is discussed in the paper. Example:

(iii) ʈiʈo tʃoksi ɖʰil-sɔŋ
   tito how fall-PFV
   'How did Tito fall?'

(iv) kʰɔ tʃi sək-**pa** ki nʰa nʰəm ɖɔʊ-ək-**pa**
   3.SG what tell-Q that 1.SG when go-FUT-Q
   'When did he say I will go?' (intended meaning- *when* interpreted in lower clause)

References

Aboh, E. O., & Pfau, R. (2011). What'sa wh-word got to do with it. *Mapping the left periphery: The cartography of syntactic structures*, *5*, 91-124.

Baker, C. L. (1970). Notes on the description of English questions: The role of an abstract question morpheme. *Foundations of language*, 197-219.

Bhatt, R., & Dayal, V. (2014, February). Polar kyaa: Y/n or speech act operator. In *Workshop on Non-Canonical Questions and Interface Issues, Kloster Hegne Universität Konstanz*.

Cable, S. (2008). Wh-fronting. *Quantification: A cross-linguistic perspective*, *64*, 105.

Cheng, L. L. S. (1997). *On the typology of wh-questions*. Taylor & Francis.

Jayaseelan, K. A. (2008). Question particles and disjunction. *Linguistic Analysis*, *38*(1), 35.

Lai-Shen Cheng, L., & Rooryck, J. (2000). Licensing wh-in-situ. *Syntax*, *3*(1), 1-19.

Rizzi, L. (2001). On the position "Int (errogative)" in the left periphery of the clause. *Current studies in Italian syntax: Essays offered to Lorenzo Renzi*, 287-296.

Sharma, D.D. (1989). Spitian. In *Tribal Languages of Himachal Pradesh: Part Two* (pp. 1-96). New Delhi, India: Mittal Publications.

[37]   *Semantics of Locative and Spatial postpositions of Bangla* ─ Sanjukta Ghosh, IIT, BHU, Varanasi, India

This paper is an attempt to describe the spatial constructions of Bangla. Spatial Semantics has been in discussion in Cognitive Linguistics over a long period of time (Talmy 2000, Levinson 2004). The semantics of prepositions has been well-studied for English (Saint-Dizier 2006). However, there is still dearth of comprehensive study on spatial postpositions of Bangla or any other Indian language. The initial data is based on the TRPS survey picture description. For describing location, Bangla uses two main types of constructions. One is Trajector - Landmark+Locative marker- copula. For example,

1. kagojTa   almarite   ache.
   Paper-CL almirah-LOC exist-3p 'The paper is in the almirah.'

2. phOlTa   Dale   roeche.
   Fruit-Cl branch-LOC stay-3p   'The fruit is on the branch.'

The semantic distinction between '*in*' (inclusion) and '*on*' (spatial support by direct contact) is blurred in Bangla. The locative marker –*e*/*te* is used in all the cases with the landmark whenever there is direct contact between the trajectory and landmark.
The second type of construction is Trajector- Landmark+GEN- Postposition- (Copula). These postpositions are derived from different spatial nouns and marked with locative marker. In this type, the trajectory and landmark has no direct contact as in (3) or the trajectory has been set with the landmark from outside and as a result they have a contact as in (4). For example,

3. cheleTa aguner   paSe   boSe ache.
   Boy-CL fire-Gen side-Loc sit   exist-3p
   'The boy is sitting beside the fire.'

4. TupiTa laThir   dOgay   lagano ache.
   Cap-CL stick-GEN end-LOC stick   exist-3p 'The cap is at the end of the stick.'

However, with the body parts even if something is attached to them from outside only the first type of construction is used (example 5).

5. plasTarTa pae   baMdha ache.
   Plaster-CL leg-LOC tie   exist-3p 'The plaster is tied on the leg.'

References
Levinson, S. C. 2004. *Space in Language and Cognition: Explorations in Cognitive Diversity*. CUP.
Saint-Dizier. 2006. Syntax and Semantics of Prepositions. Springer.
Talmy, Leonard. 2000. Toward a cognitive semantics. Vol 2, Typology and process in concept structuring. Cambridge, MA: MIT Press.
Zlatev Jordan. 2007. 'Spatial Semantics' in Oxford handbook of Cognitive Linguistics. OUP.

[38]   *Vocatives in Saraiki* ― Nasir Abbas Rizvi Syed, Lasbela University of Agriculture, Uthal, Balochistan Pakistan; Tooba Sahar, Lasbela University of Agriculture, Uthal, Balochistan Pakistan

This study analyzes forms and functions of vocatives in Saraiki. Saraiki is a lesser known language of the Indo-Aryan family spoken in Pakistan (Bashir, Conners, & Hefright, 2018). Vocatives in Saraiki involve prosodic (rising intonation), phonological (vowel alternation), morphological (suffixation) and various

syntactic (interjection, exclamatory, curses, abusive, etc. phrases) forms of realization. Different forms of words are used for different functions in vocative cases expressed in the form of nouns, adjectives or noun-/verb-/adjectival-phrases. Proper and common nouns in both truncated and non-truncated forms are used as vocatives in Saraiki. Truncation normally shortens phonologically longer words showing frankness between speaker and listener. The nature of relationship between participants of speech and feelings of the speaker are reflected in morphological alterations of full or truncated nouns. Similarly, nicknaming (which is mostly a truncated version of the original noun) also has a very closer relationship with vocative cases. Saraiki changes morphological structure of words using various suffixes for expression of different feelings in vocatives. A single person can be addressed in several different forms reflecting different feelings of the speaker or varying nature of the addressee-caller relationship as shown in Appendix-A.

The vowel [i] is a morpheme which is used as a marker of feminine gender in Saraiki but it is also used in vocative cases for male addressees to reflect severe hatred of the speaker/caller for the addressee. In other words, if a female named 'Noor' is called 'Noori' it reflects only lower status of the addressee but if the same is used for a male named 'Noor', it will reflect extreme hatred of the caller for the addressee. Particles are also used for address in vocatives in Saraiki e.g. 'a, o, oo, hoo, au, oe'. All these have different semantic connotations in Saraiki.

Besides this, different other phrases are used in Saraiki as vocatives which are pregnant with various feelings like prayers showing special relations, normally those between lovers, couples or closer relatives like father/mother and son/daughter, or brother and sisters etc. Curse-expressions are also used as vocatives between a familiar addressee showing anger; abusive phrases are used for lower status addressee and for showing hatred (Appendix-B). Vocatives in the form of interjections (IVs) are also commonly used in other Indo-Aryan languages for calling attention of the addressee (Gupta, 2015). Normally, Vocatives are either nouns or noun phrases but in Saraiki, along with Noun Phrase, Verb Phrase, Adjectival and Adverbial Phrases are also used as IVs (Appendix-C).

Using oblique form of a noun as subject is a way to call someone in Saraiki: kale a! (O Kala!). Oblique forms of nouns can be used as vocatives for all types of expressions showing any kind of feelings. The major functions of vocative interjections e.g. summoning attention, identifying the addressee and showing relationship are performed in Saraiki. A very close relationship between nicknaming and vocative cases in Saraiki will also be highlighted in the data presented in this paper. Quite interestingly, vocatives can be used for inanimate objects in Saraiki.

In the world languages, mostly vocatives have silent speaker with no indication of the caller (Hill, 2007). However, some languages use imposters using 3rd person phrases for 1st person (Akkus & Hill, 2018). Saraiki also uses similar expressions as vocative phrases. Non-silent speaker is visible in the Saraiki expressions listed in appendix-D. Like Basque allocative clitics (Haddican, 2015), Saraiki also uses pronominal clitics of 2nd person to convert a verb into vocative as illustrated in Appendix E.

This paper presents and analyzes morphological and syntactic structure of vocative cases and phrases in Saraiki. It also discusses functions of vocatives in Saraiki.

Appendices

A: Morphological structure of vocatives in Saraiki
Morphemes [i], [a], [ã], [uː], [o], [aja], [ʌŋ], [ta], [ɽa] are suffixed to derive vocatives of differing connotations as the following examples of the proper names 'Noor'(i-v) and 'Kala (vi-vii) show;
  i.   Noori!: Severe hatred for a male (M) but/or lower status for female (F) addressee

ii.   Noora! (M): frankness but lower status of the addressee, Noorã! (F): amicable call
iii.   Nooru!: (M)/Nooro! (F): amiable call but lower status of the addressee
iv.   Nooraya (M): showing extreme love
v.   Noorʌɳ! (M): Equal but very romantic relationship normally used by/for spouse/lover/beloved
vi.   Kalta (M): Severe hatred
vii. kalɽa!: (M) Call with ridicule

B: Vocatives in the form of interjections

jeevẽ! May you live long (for spouse)
hovẽ! May you live long (for son/daughter or younger brother/sister)
marrẽ! May you die (for anyone of inferior status for calling with anger or hatred)

NB: In all above expressions, vowel [ẽ] attached to the verbal stem is a pronominal suffix for second person used to convert it into a vocative.

C: Vocatives in various phrases

NP: bhẽɳ da bhira wa! (O you brother of your sister!)
(sister of brother O!)
AP: sõɳʰã! O you beautiful
VP: marrẽ! may you die!

D: Genitive in vocatives (non-silent speaker)

Dhiya! O my daughter

E: Allocutive clitics in VP used for calling attention along with providing information

i.   Vesnia! They will go!
      (ve+s+n+i+a) (go+FUTURE+3PL+2SG+VOCATIVE)
ii.   Venda pai! (He is going!)
      (ve+dapia+i) (Go+ing is+2SG)

References

Akkus, F., & Hill, V. (2018). The Speaker in Inverse Vocatives. In W. G. B. e. al. (Ed.), *Proceedings of the 35th West Coast Conference on Formal Linguistics* (pp. 49-58). Somerville, MA: Cascadilla Proceedings Project.

Bashir, E., Conners, T. J., & Hefright, B. (2018). *A Descriptive Grammar of Hindko, Panjabi and Saraiki*. Berlin: De Gruyter Mouton.

Gupta, G. K. (2015). Vocative Interjections in Address Forms in Bhojpuri: A Study of Honorifics. *Inverstigationes Linguisticae, 32*, 144-161.

Haddican, B. (2015). A note on Basque vocative clitics. In B. Fernández & P. Salaburu (Eds.), *Ibon Sarasola, Gorazarre* (pp. 303-317). Bilbao: Bilbao: University of the Basque Country.

Hill, V. (2007). Vocatives and the pragmatics: Syntax interface. *Lingua, 117*(12), 2077-2105.

[39]   *Stripping in Tamil: PF deletion approach* ─ Rajamathangi Shanmugasundaram, Jawaharlal Nehru University, New Delhi, India

Introduction: This paper will explore the elliptical phenomenon called Stripping in Tamil, a language of the Dravidian family. This paper will prove that ellipsis site in Tamil Stripping has unpronounced syntactic structure by adopting the analysis proposed by Merchant (2001, 2003). It will also demonstrate how parallelism requirement in Stripping is satisfied in Tamil. This paper will also show how licensing condition for ellipsis is followed in Tamil Stripping. It further, offers explanation to how the features of Negation in Tamil, makes negative Stripping ungrammatical. This paper finally establishes how /–um/ a conjunction marker in Tamil serves as an additive particle in the context of Stripping.

Phenomenon: The term stripping was coined by Hankamer and Sag (1976: 409): Stripping is a process that deletes everything in a clause under same identity with corresponding parts of a preceding clause except for one constituent (and sometimes a clause initial adverb or negative). Example (1) shows the Stripping construction in English and the phrase bracketed is the antecedent and bolded 'e' is the elided part.

1. Ram [eats apple], and Somu, too. [e]

We can observe the same pattern in Tamil too. For example,

2. ɟɔn   [vɪːttʊ-kkʊ   ponaːn]   mɛrɪ-y-ʊm   taːn [e]
    John-3SM   home-Loc   go-past-3SM   Mary-3SF-too   Foc
    'John went home and Mary, too [e]'

[The suffix –um, whose functions are to mark: additivity, conjunction, maximality with quantifiers, maximality with numerals, polarity-sensitivity, and unconditional (Iyer 2017). In Tamil Stripping, it functions as additive particle as –um is suffixed with the subject remnant which gives reading of 'also'.]

In (2), the second clause is deleted under identity to its preceding clause by leaving a constituent 'mɛrɪ-y-ʊm taːn' Further it has been observed that in English, negation is stranded under stripping in addition to the focused element, as in example (3). In such cases, negation is typically obligatory with the connectors 'but'. This is called Negative Stripping by Merchant (2003).

3. Abby [speaks passable Dutch], but not Ben [e].   [Merchant 2003: (1c)]

But in Tamil, Negative Stripping is not possible because the main verb has to be pronounced along with Negation and only internal arguments can be dropped as in (4). If negation strands alone by dropping the main verb then it is an ungrammatical sentence as in (5).

4. ɟɔn   [kadaɪ-kkʊ]   po-n-aːn   aːnaːl   sitaː: [e]   pog-ə   lə
   John-3SM   Shop-Loc   go-past-3SM   but   Sita-3SF   go-Inf   Neg
   'John went to shop but not Sita'

5. *ɟɔn   [kadaɪ-kkʊ]   po-n-aːn]   aːnaːl   sitaː: [e]   lə
   John-3SM   Shop-Loc   go-past-3SM   but   Sita-3SF   Neg
   'John went to shop but not Sita'

In Tamil, when negation occurs in a sentence, the form of verb inflection is different from the verb inflected with tense and phi-features. For example,

6a. raːm   odɪ-n-aːn   6b. raːm   od-a-lə
    Ram-3SM-NOM   run-PST-3SM   Ram-3SM-NOM   run-INF-NEG
    'Ram ran'   'Ram didn't run'

In (6a), the verb is in finite form whereas in sentence (6b), the verb takes an infinitive marker changing the form of the verb. And also the negation 'illa' in Tamil[1] is an existential copula verb because of that when Negation stands alone like in example (5) second clause, it will give meaning that 'John went to shop but Sita is not there'. Therefore, in such environments Stripping can't occur in Tamil and thus Negative Stripping is not possible in Tamil.

Two main conditions: Identity and licensing condition are the two main conditions in Ellipsis. One of the primary reasons for arguing that stripping involves full, regular syntactic structures which go unpronounced are form-identity effects. Merchant (2001) says once syntactic identity is fulfilled semantic identity follows it which he calls parallel isomorphism. From examples (2 & 4) we can see that in Tamil whenever the elided part and the antecedent part don't have same morpho-syntactic identity, stripping does not occur. This clearly shows that in Tamil, Stripping is not possible in disjunction but is grammatical only in conjunction constructions. Stripping in Tamil is possible only when the ellipsis is licensed under a specific syntactic head. In Negative Stripping in Tamil, it is the Negation that strands before ellipsis site but as the nature of Negation in Tamil makes it to be attached with the main verb negative Stripping is ungrammatical in Tamil. Because it is the Focus marker ta:n that licenses the deletion in Stripping of Tamil. Thus licensing also plays a vital role along with identity condition.

Analysis: For Sluicing, Merchant (2001) assumes that there is an [E] feature which triggers deletion of the complement of the head on which it resides. The syntactic specification of the [E] feature ensures that it can only occur on certain heads, thus capturing the licensing requirement on ellipsis. He suggests the same [E] feature analysis for Stripping in English that the head selecting the TP in a stripping context has an Ellipsis feature (E$_{stripping}$) which licenses is complement to be elided. E[stripping] feature involves a strong focus feature which attracts a focus element to its specifier.

Thus on the lines of Merchant's analysis is adopted for Stripping in Tamil. In Tamil, it is observed that ta:n functions as focus, topic, emphasis and also in cleft constructions (Murugaiyan 2009). Other languages have prosodic focus but Tamil has focus marker which is morphologically overt. The focus marker ta:n which is in head of FocP has E-feature and it attracts the focused subject from Spec of TP through remnant movement,[2] to the Spec of FocP and the complement (TP) of Foc head is elided. This results in TP ellipsis and that's why Stripping is a type of Clausal Ellipsis. Below diagram shows the syntactic structure of Stripping in Tamil.

Conclusion: The requirement of remnant movement, identity condition and licensing condition at syntactic level, it proves that there is an unpronounced syntactic structure in Tamil Stripping. Thus, the above described phenomenon in Tamil substantiates the PF deletion hypothesis as an account for Ellipsis. Keywords: Ellipsis, Syntax, Semantics, Tamil, Dravidian.

Notes:
[1] Note: The reduced form of Negation 'illa' in Tamil is 'lə'in spoken varieties.
[2] The subject which is already moved from Spec vP to Spec TP, again moves to Spec of Focus because of the E- feature on focus head.

References
Hankamer, J., & Sag, I. (1976) Deep and surface anaphora. *Linguistic inquiry*, 7(3), 391-428.
Iyer, J. (2017) Towards a universal analysis of Tamil–UM NPIs: Evidence from unconditionals. Ms. UMass Generals Paper.
Merchant, J. (2001) *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford University Press on Demand.
Merchant, J. (2003). Remarks on stripping. Ms., University of Chicago.
Murugaiyan, A. (2009) Focus Constructions in Modern Tamil. *International Journal of Dravidian Linguistics*, 38(2), 43-69.

[40]   *Named Entity Recognition for Bhojpuri* — Salman Alam, EFLU, Hyderabad

Bhojpuri is a dialect of Hindi which belongs to the Indo-Aryan language family, widely spoken in Eastern part of U.P, western part of Bihar and in Tarai region of Nepal. Bhojpuri is one of the official languages of Mauritius spoken by 5% of the population. It has more than fifty million speakers in India. *Named Entity Recognition* is a system which retrieves Named Entity such as Name, place, location, time etc. from the corpus. NER is an important tool for information retrieval, phase detection, sense disambiguation, keyword matches and many other NLP applications.

In this task, Named Entity Recognition (NER) for Bhojpuri is developed using machine learning algorithm models. Developing an NER for Bhojpuri language will lead to one higher level of digitalization of the Language. This will be the *first* NER system for Bhojpuri as per my best knowledge.

Challenges in developing NER for Bhojpuri:
Developing an NER for Bhojpuri could be quite challenging due to lack of resources. NERIL (Named Entity Recognition Indian Languages) discusses a number of challenges to develop NER for Indian languages which is applicable to Bhojpuri as well.

- Bhojpuri is a morphologically rich language which makes it difficult to find the roots.
- There is no capitalization rule in Bhojpuri like English, which is an important feature to develop NER for a language.
- Differentiating between common noun and proper is quite confusing for computers for e.g. in Bhojpuri *kamalwa* is a common noun which is a flower as well as it could be the name of a person
- No structured corpus of Bhojpuri exists till date; moreover, the language itself exhibits several regional variations.

Methodology:
The following steps were involved in order to develop NER for Bhojpuri:
Dataset: Raw data had been scraped from various websites e.g. www.bhojpuriaa.com , www.thebhojpuri.com *etc.* The corpus consist of 4000 annotated Bhojpuri words. The dataset had been tagged manually using BIS tagset.
Training and testing: The annotated dataset had been split at a measure of 75-25 for training and testing purpose.
Machine learning Models: The models implemented as of now for this particular task were Conditional Random Field (CRF) and Support Vector Machine (SVM).

Results:
The corpus which consisted of 4000 words were divided into 3000 words for training and 1000 words for testing. Next, the two machine learning models were implemented on the corpus one after the other to yield the following result:

ML algorithm	Training words	Testing words	Accuracy in %
CRF	3000	1000	71
SVM	3000	1000	73

The accuracy percentage as of now with the existing dataset seems to be higher in case of SVM than CRF although the difference between the two is not great. However, one can get a cue that SVM could be a better model for the same task. But the result may also change in a larger dataset on which I am planning to work on soon to get a better generalization.

Conclusion and Future work:

As we can see in the above table that the accuracy achieved in developing the NER with the CRF machine learning model is 71% and that with SVM is 73% in a dataset consisting of 4000 Bhojpuri words. However, as claimed before, I am planning to add more words to the corpus to get a more generalized result. Also, I wish to explore some other machine learning approaches to accomplish the same task and get better predictions.

Digitalization of Bhojpuri with the help of NER would help the language to be globally recognized and would encourage further work in the development of the language computationally. It might also help the monolingual native speakers of the language to avail the areas that were inaccessible to them otherwise leading to an indirect overall development in the society.

References
A. Das and U. Garain *CRF-based Named Entity Recognition @ICON 2013.*
A. Ekbal and S. Bandyopadhyay *"Named Entity Recognition using Support VectorMachine: A Language Independent Approach",* World Academy of Science, Engineering and Technology International Journal of Electrical and Computer Engineering Vol: 4, No:3, 2010.
A. Ekbal and S. Bandyopadhyay. 2007d. *"A Webbased Bengali News Corpus for Named Entity Recognition".* Language Resources and Evaluation Journal.
NERI held in conjunction with FIRE 2013 Forum for Information Retrieval Evaluation 4 - 6 December 2013, India International Centre, New Delhi.

[41] *Generics with/without '-ra' Classifier in Bangla* ─ Rupkatha Mukherjee, The English and Foreign Languages University, Hyderabad, India

The Bangla Plural Classifier '-ra' captures a number of significant properties. It is restricted for animate nouns under specific circumstances and is believed to denote 'kind level predicates' due to its indefinite characteristics. As proposed by many linguists (Dayal (2014)*,* Biswas (2012) etc.), the '-ra' classifier performs a special function in case of Generic Sentences. They established with examples that the Bangla generic sentences comprising of human Nouns are necessarily formed with the presence of the '-ra' classifier and for non-human animate nouns '-ra' is optional. However, the data suggests something more than that. Here is an observation about the generic sentences formed with 'ra' and its +*human* compliment in Bangla

1. Chele-ra lomba hoy
   Boy-cla   tall   be.prs
   boys are tall
2. Ukil-ra   dhoni hoy
   lawyer-cla   rich   be.prs
   lawyers are rich
3. Bangali ra   mishit   khete bhalobashe.
   Bengali-cla sweets eat   love.prs
   Bengalis love to eat sweets.

All the above NPs in the Subject position combines with the classifier '-ra' to produce a generic sentence. But in the following examples the same is unacceptable.

4. Manush(*ra) moronshil (hoy)
   Man-cla   immortal   be.prs neg
   Man is mortal

5. Aj   Lok(*ra)   ashbe   barite
   Today people   come.fut house
   Today some people will visit our house.

The Bare nominal form in the fourth and fifth sentences seems to be the only correct grammatical generic construction with the NPs 'manush'/'lok'.

'Manush' and 'lok' refer to a particular class of species. While forming a generic sentence referring to 'man' as the kind as a whole the classifier 'ra' is dropped. The examples 1 to 3 are generic sentences which refer to sub-class of the human kind (boy/girl/lawyer/labour/children/Bengalis). In such cases dropping the classifier leads to unacceptable sentences.

On the other hand, when the NP is preceded by *attributive expressions* or in *possessive constructions*, the addition of ra stands mandatory. Dropping the classifier in such cases would only infer a singular construction if at all that sounds acceptable to the native speakers.

6. Gyani   manush ra ei   katha bole gachen
   Learned man-cla   this word say.past
   Learned men have said these words
7. Gorib   manush ra oshohay hoy
   Poor   man-cla   helpless be.prs
   Poor men are helpless
8. Cheler   barir   lokera   khub bhalo
   Boy-gen home-gen people-cls   very nice
   The people from the boy's family are very nice

6,7,8 are generic sentences which are again referring to a specific sub class of the human kind due to the presence of the adjectives and the possessor Noun . The occurrence of the classifier is hence mandated in these sentences for the same reason. If we look at the generic sentences referring to *non-human animate* Nouns:

9. Ghora   ghash khay
   horse-cla grass eat
   horses eat grass
10. Kukur   grihopalito poshu
    Dog-cla domestic   animal
    Dogs are domestic animal

It should be noted that the sentences are referring to species and not sub species. The addition of the plural classifier with the Noun is far from acceptable in such sentences. If we look at the sub-class of these species by adding *adjectives* or *possessor Nouns* it is observed that the presence of the Classifier is preferable to native speakers:

11. kalo   ghora-ra   beshi jore cchote
    black horse -cla more fast run
    Black horses run faster.
12. dog-show-r   kukur-ra khub bhalo trained hoy
    dog show-gen dog-cla   very well   trained be.
    The Dogs of the dog show are very well trained.

67

Thus we get our cue from the above data that in generic sentences the existence of the classifier is unacceptable when the Subject NP(human/non-human) refers to an entire class/kind of species. But while symbolizing sub species of the class, the Classifier '-ra' is mandatory in Bangla. Hence the distinction is not of Human and non-human but of Sets and subsets. Each Class of species (human/dog/horse etc.) represents a set of sets(say X) and its subclasses(boy/lawyer/old people/black dogs etc.) represent sub sets of X(say A,B,C). This suggestion would be explicitly described in the main paper. Thus the semantic notation of '-ra' can be interpreted tentatively in case of generic sentence in the following way:

$$⟦–ra⟧ = \lambda x^k: \forall a_1 \forall A_s \exists X_s[a_1 \leq_i A_s \wedge A_s \leq X_s] \rightarrow \textbf{animates } (a_1)]. [x]$$ (modified from Dayal 2014)
(This might get modified further in future as I analyse more data)

While referring to a class/kind, the kind denoting Bare Singular Nominal serves the purpose in forming generic sentences whereas the classifier is obligatory to interpret an acceptable generic reading for the NPs symbolising the subclasses of the whole kind. The main work would explain the hypothesis with more examples and detailed semantics along with cross linguistic evidence of the proposal with few other Classifier rich languages.

Reference
Biswas, Priyanka.2012. "Plurality in a Classifier Language: Two Types of Plurals In Bangla", University of Southern California
Dayal, Veneeta. 2012. "Bangla Classifiers: Mediating between Kinds and Objects", *Rivista di Linguistica/Italian Journal of Linguistics* 24.2, pp: 195-226.
Dayal, Veneeta. 2014. Bangla Plural Classifiers. SAGE Journals. Rutgers University eds., *The Oxford Handbook of Comparative Syntax*, pages 1–22. Oxford: Oxford University Press.
Simpson, Andrew et al. 2011. Bare Classifiers and Definiteness: A Cross-linguistic Investigation. *Studies in Language* 35.1: 168-193.

[42] *Allomophy in Brahvi negation marker* — Riaz Ahmad, Lasbela University of Agriculture, Uthal, Balochistan Pakistan; Shah Syed Abdul Waheed, Lasbela University of Agriculture, Uthal, Balochistan Pakistan

In this paper, we present and analyze data on allomorphy in Brahvi negation marker 'pa' (which means 'not' in Brahvi). Brahvi is the only Dravidian language spoken in Pakistan (Subrahmanyam, 2009; Elfenbein, 2007). All other Dravidian languages are mainly spoken in southern and central India (Kalipakam et al, 2018; Krishnamurti, 2003). Brahvi applies affix 'pa' for negation. The affix 'pa' is a bound morpheme which is attached with the verbal stem. (e.g. xal 'beat' xal+pa 'do not beat'). The negation marker 'pa' is also attached with copula to make negative sentences. In case of occurrence of both principal and copular verb the negation marker is suffixed with the copular verb. The affix 'pa' has different allomorphs which are obtained by substituting [p] of the negation marker 'pa' with /f/, /o/, /v/ or /t/. 'pa' and 'fa' are used in present and future tenses while 'ta' or 'tao' is only used in past tenses (Examples are illustrated in appendix A). However, 'pa' is more common and frequent than the other forms.

The negation marker also triggers different phonological processes like deletion, insertion, spreading and metathesis (displacement). /r/ is always deleted when 'pa' is suffixed to a verb ending on [r]. To break the cluster 'rp'. Such [r] deletion occurs because Brahvi does not accept [rp] as hetro-syllabic clusters. 'pa' also triggers spreading in such cases to occupy the empty slot resulting into gemination. (e.g. 'hur+pa→ 'huppa') (see Appendix B). Besides /r/ deletion, /r/ insertion is also used to break the hiatus of two vowels e.g.

'xalo+pa→ xalparo'. In xal.pa.ro 'xal' is the stem 'o' is the future marker and 'pa' is the negative marker which is infixed with 'xalo' (he will beat). /r/ is inserted to break the hiatus of vowels. /t/ insertion also occurs when there is cluster of three consonants. Like 'xalk' (he beat) has its negative xalk+pa→ xaltao (He didn't beat). 'xal' is the principal verb and [k] is a past tense marker in Brahvi. The cluster of [kp] coalesces into [t] but leaving labial vowel [o] on word-final position. Thus, 'tao' is the allomorph of 'pa' in Brahvi. The negation affix 'pa' also triggers labial spreading. For example, coronal nasal /n/ at final position changes into /m/ when [pa] is suffixed to it. (e.g.'kun+pa'→kumpa) (see Appendix B). Negative markers can occur at final and medial positions.

Negation also triggers displacement or metathesis in Jhalawani dialect of Brahvi. /p/ is replaced with /f/ in Jhalawani dialect which treats negation differently in future tenses. Whereas the speakers of other dialects of Brahvi speak the word 'xal.pa.ro' the speakers of Jhalawani dialect say 'xal.of.'. Here /p/ moves to the word-final position and is substituted with /f/. (See similar examples in appendix C). The negative marker 'fa' is very common in future tenses in Jhalawani dialect but it is very uncommon in all other dialects in present and past tenses.

In some contexts, vowel [o], which is a form of the consonant [p] of the negation marker, changes into [v] to break the hiatus of vowels between two syllables, which provides onset to the onsetless morphemes; for example, if pronominal suffixes of first or second persons which are [ut] and [us] respectively (Bray, 1907/2014), are added to the word 'xaltao' the output becomes 'xaltavat' (I did not beat) and 'xaltaves' (you did not beat) respectively. The route of development is xaltao+ut → 'xaltavat' and xaltao+us →'xaltaves'. In this paper, we analyze examples from various dialects of Brahvi to highlight how interaction between phonology and morphology develops variation in morphemes of Brahvi.

References

Bray, D. (1907/2014) *The Brahui language*. Quetta: Brahui Academy Quetta.
Elfenbein, J. (2007). Brahvi. In Steve, S. B. (Editor), *The Dravidian languages* (pp 388-414), London: Routledge.
Kalipakam, V., Jordan, F. M., Dunn, M., Greenhill, S.J., Bouckaert, R., Gray., R.D., & Verkerk, A. (2018) A Baysian phylogenetic study of the Dravidian language family. *Royal Society Open Science*, 5(3), 171504.
Karishnamurti, B. (2003). *The Dravidian languages*. Cambridge: Cambridge University Press.
Subrahmanyam, P, S. (2009) Brahui. In Brown, K., & Ogilvie, S. (eds). *Concise encyclopedia of languages of the world:* Elsevier Ltd Oxford. UK 162-166

Appendices
Appendix A: Allomorphy in Negation markers

Xal	Beat	Xalpa	don't beat
Bit	Throw	Bitpa	don't throw
Sal	Stand	Salpa	don't stand
Xalk	he beat	xal.tao	he did not beat.
Xas.sa	he threw	xas.tao	he did not throw
Bar	come	bafa	don't come
Ith	give	tifa	don't give
Mar	become	mafa	don't become

Appendix B: Spreading of feature labial after [r] deletion

Kar	Do	kappa	don't do
Hur	see	Huppa	don't see
Kun	eat	kumpa	don't eat
Hin	go	himpa	don't go

Appendix C: Dialectal variation in Brahvi

Sarawani/Noushki				Jhalawani
Xalo	he will beat	Xal.pa.ro	he won't beat	xa.lof
Bito	he will throw	Bitpa.ro	he won't throw	bitof
Salo	he will stand	Sal.pa.ro	he won't stand	sal.of

[43]   *Gender in Marathi: descriptions and typology* — Shubhangi Kardile, Deccan College, Pune, India

Descriptions of gender in Marathi vary in their accounts. It has been described as being 'neither semantically nor morphologically determined' and 'purely conventional' (Pandharipande, 1997). There are inconstancies in the descriptions when it comes to the semantic, phonological and morphological criteria (Pandharipande 1997; Dhongade and Wali, 2009). A systematic description of gender in Marathi is available where formal criteria are being used (Acharya, 1977). In all the above descriptions semantic aspect is not considered or acknowledged. On the other hand, there has been work done on grammatical gender from perspectives of description and typology (Audring, 2014 and 2017; Corbett 1991; Dixon, 1986; Rice 2005), psycholinguistics/cognitive linguistics (Comrie, 1999), and evolution of the grammatical category (Trudgill, 1999) among others.

The present paper evaluates the description put forwarded by Acharya (1977). It also considers the role and interaction of semantic criteria and formal criteria in describing grammatical gender in Marathi from the points of view or rules and constraints (especially in Optimality Theory). The paper tries to situate Marathi in typology of gender by using the typology checklist- a questionnaire devised by Corbett (1992) and a relatively recent approach of canonical typology (Audring, 2014 and 2017).

References

Acharya, A. S. 1977. Towards the identification of the genders of the nouns in Marathi. *Bulletin of Deccan College and Research Institute* Vol. XXXVI No. 1-4. pp. 1-7.

Audring, J. 2014. Gender as a complex feature. *Language Sciences* Vol. 43: 5-17.

Audring, J. 2017. Calibrating complexity: how complex is a gender system? *Language Sciences* Vol. 43: 5-17.

Comrie, B. 1999. Grammatical Gender Systems: A Linguist's Assessment. Journal of Psycholinguistic Research Vol. 28 No. 5: 457-466.

Corbett, C. G. 1991.Gender. Cambridge: Cambridge University Press.

Corbett. G. C. 1992. Typology Checklist – ESF working group on NP structure. Downloaded from: https://www.eva.mpg.de/lingua/tools-at-lingboard/pdf/corbett.pdf

Dhongde and Wali. 2009. *Marathi*. Amsterdam/Philadelphia: John Benjamins Publishing Company: 40-43.

Dixon, R. M. W. 1986. Noun classes and noun classification in typological perspective. In Craig, G. (ed). *Noun Classes and Categorization*. Amsterdam/Philadelphia: John Benjamins Publishing Company: 105-112.

Pandharipande, R. 1997. *Marathi*. Routledge: 276-281 & 368-370.

Rice, C. 2005. Optimizing gender. *Lingua* 116(9): 1394-1417.

Trudgill, P. 1999. Language Contact and the function of linguistic gender. *Poznań Studies in Contemporary Linguistics* 35: 133-152.

Zubin, D. A. and K-M. Köpcke. 1986. Gender and folk taxonomy: the indexical relation between grammatical and lexical categorization.. In Craig, G. (ed). *Noun Classes and Categorization*. Amsterdam/Philadelphia: John Benjamins Publishing Company: 139-180.

[44]   *Semantic Interpretation of Hindi domain-specific Compound Nouns* — Vandana Dwivedi, Indian Institute of Technology & BHU, India; Sanjukta Ghosh, Indian Institute of Technology & BHU, India

Compound noun interpretation task is very important for many applications of NLP such as Machine translation, Information Retrieval, Text Summarization, building Question-answering system etc. This paper is an attempt to classify the Hindi compound nouns based on their semantic relations. The study is done collecting compound nouns from the corpus of Health domain.

There have been a lot number of works done for the interpretation of English compound nouns in theoretical linguistics as well as in computational linguistics (Levi (1978), Warren (1978), Lauer (1995), Barbara Rosario (2001), Rosario and Heart (2001), Girju et al (2005), Kim and Baldwin (2005), Ó Séaghdha (2008), Tratz and Hovy (2010), Nakov (2012), Séaghdha and Copestake (2013), Dima and Hinrichs (2015)). However, in Indian languages this kind of work is scarcely found except a few papers in compound noun extraction (Kunchukuttan and Damani (2008), Kulkarni et al (2012), Gayen and Sarkar (2013)) and one MS Thesis on Hindi compound noun interpretation (Rallapalli (2017)).

We collected 200 compound nouns from Health domain corpus of around 20,000 words and classified them based on their semantic relations such as Type, Purpose, Measure of, Location, Cause etc. using the classification criteria of Rosario (2001). We examined the meaning of the constituent words of a noun pair looking at the context where they occur and assigned them a relation type. Traditional Sanskrit compound classification is not very useful in identifying these relations because often in two compounds Sanskrit types are same For example, डेंगू वायरस 'Dengue virus' and डेंगू बुखार 'dengue fever' both are ṣaṣThI tatpuruṣa samAsa (तत्पुरुष समास), but *dengue virus* is a virus which causes dengue and *dengue fever* is a type of fever. Therefore, in the first case, the type of relation is 'Cause' and in the second the type is a 'Type of'. We also examined more than two noun sequences like अम्ल पहचान परीक्षण 'acid identification test' and जन स्वास्थ्य समस्या 'public health problem' to find out the relations and bracketing of the nouns together.

References
Gayen and Sarkar. 2013. "Automatic Identification of Bengali Noun-Noun Compounds Using Random Forest". In *Proceedings of the 9th Workshop on Multiword Expressions* (MWE 2013), pages 64–72,
Girju, R., D. Moldovan, M. Tatu, and D. Antohe (2005). "On the semantics of noun compounds". *Computer Speech and Language* 19(4), 479–496.
Kim, S. N. and T. Baldwin (2005). "Automatic interpretation of noun compounds using WordNet similarity." In *Proceedings of the 2nd International Joint Conference on Natural Language Processing*.
Kulkarni, et al (2012). "Semantic processing of compounds in Indian languages". In *Proceedings of COLING-2012*, Mumbai-India, pp: 1489-1502.
Kunchukuttan and Damani. 2008. "A System for Compound Noun Multiword Expression Extraction for Hindi". In *proceeding of 6th International Conference on National Language Processing (ICON)*. pp. 20-29.
Lauer, M. (1995). Designing Statistical Language Learners: Experiments on Compound Nouns. Ph. D. thesis, Macquarie University.
Levi, Judith. 1978. *The Syntax and Semantics of Complex Nominals*. Academic Press, New York.
Liben and Jarema (eds.). 2006. *The representation and processing of compound words*. OUP.
Nakov Preslav. 2013. "On the interpretation of noun compounds: Syntax, semantics and entailment." In *Natural Language Engineering* 1 (1). 1-40.
Ó Séaghdha, D. (2008). Learning compound noun semantics. Ph. D. thesis, Computer laboratory, University of Cambridge. Published as University of Cambridge Computer Laboratory Technical Report 735.
Ó Séaghdha, D. and A. Copestake (2013). "Interpreting compound nouns with kernel methods". Natural Language Engineering 19(03), 331–356.
Rallapalli Sruti. 2017. Interpretation of Nominal Compounds Using Structured Knowledgebases. MS thesis submitted in LTRC, IIIT Hyderabad.
Rosario, B. and M. Hearst. 2001. "Classifying the semantic relations in noun compounds". In Proceedings of the 2001 Conference on Empirical Methods in Natural Language Processing.

Tratz, S. and E. Hovy. 2010. "A taxonomy, dataset, and classifier for automatic noun compound interpretation". In *Proceedings of the 48th Annual Meeting of the Association for Computational Linguistics (ACL-10)*, Uppsala, Sweden.

Warren, Beatrice. 1978. *Semantic Patterns of Noun-Noun Compounds*. Gothenburg Studies in English 41, Gothenburg, Actr Universitatis Gothoburgensis.

[45] *Experiencer Subject Constructions in Assamese* ─ Ankur Jyoti Das, English and Foreign Languages University, Hyderabad, India

Key Contributions: This paper gives an account of the experiencer subject constructions in Assamese where the subject gets the genitive while in European languages, it gets the nominative case and most Indian languages, it gets the dative case. Subjecthood properties of the experiencer subject will also be checked whether they support it to be a subject or not. We will use Lexical and Functional Grammar Approach (LFG) to show the relation between arguments and their case. Lastly, the paper shows where the experiencer subject is originally generated and its movements under Minimalist Approach.

Experiencer Subject Constructions in Assamese: Experiencer subjects are subjects which go through a change of their mental state. According to Chomsky (1981), when the experiencer arguments are realized as subjects, they are structurally marked with nominative case by the INFL, however, the presence of dative subjects in South Indian Languages and genitive subjects in Assamese, Bangla and Oriya contradicts the claim. In example (1), we can see how the experiencer subject is getting genitive case in Assamese. Normally, genitive case shows possession but in case of experiencer subject it functions differently. We will see if there is any relation between genitive case and experiencer subjects.

(1) sikʰa-r   kʰɔng utʰ-i-s-e   [Assamese]
     Sikha-GEN anger   raise-ASP-exist-3
     'Sikha is angry.'

Amalgamation of Two Meanings: According to Mohanan and Mohanan (1988) & Mohanan (1994), in experiencer subject constructions, there seems to be an 'amalgamation of two semantic meanings' which means along with the experiencer theta role, the subject gets one more theta role. In Malayalam, the experiencer subjects get another theta role of a GOAL along with experiencer theta role because the construction denotes a meaning that something seems to be coming towards the subject as in (2). To prove this, Mohanan (1994) assumes LFG which says there is a one to one relation between case and theta role. For Malayalam and other South Indian languages it works perfectly because dative case perfectly matches the goal theta role and they are in a one to one relation. Let us see whether it works in Assamese or not. As already stated, in Assamese, the experiencer subjects get the genitive case, it also matches the thematic role of the subject. Genitive case shows possession and in the experiencer subjects in Assamese also, we see possession. In (1), the subject has possession over the object i.e. anger. In Assamese also, we see the amalgamation but with different case and different theta role. LFG is satisfied here also. In the paper, LFG is discussed in detail.

(2) aval-kkə   dukkʰam vannu   [Malayalam]
     3.SG.F-DAT sadness   come.PST
     'She became sad.' (lit. – Sadness came to her)

Subjecthood Properties of the Experiencer Subjects: To consider a subject, we can take the help of two kinds of properties: coding properties and behavioral properties. There are three main coding properties to identify

72

a subject in a language: case, agreement and word order (Keenan 1976). The case automatically gets rejected because unlike the prototypical nominative case, the subject gets genitive case in the experiencer subject constructions. If we see agreement, there is only one agreement that suffixed to all verbs in this type of constructions i.e. 3rd person agreement –e. Word order also does not seem to help so much because Assamese has a free word order where scrambling is allowed. We will now take the help of behavioral properties: conjunction reduction and reflexivization. In the paper, it is discussed in detail that only reflexivisation among all the properties including coding properties also supports the experiencer subject to be a subject. But depending on only one property, it will not be justifiable to call it a proper subject like nominative subject which satisfies all the properties. It only takes the subject position in the absence of the prototypical nominative subject to satisfy Extended Projection Principle (EPP).

Our Analysis: Expanding Nath's (2013) mechanism, we are bringing an analysis with a little change. The change is that the genitive subject is first generated in the NP spec (complement of VP) unlike Nath (2013) where it is generated in the VP spec because for genitives, there should be a head and that head is the head noun of the NP. Then the genitive subject comes out of the spec of NP and moves to spec of VP. Then it left adjoins to TP to satisfy EPP and to get the desired word order. It does not move to spec of TP because it is occupied by only nominative subject which satisfies all the subjecthood properties. We will see it below:
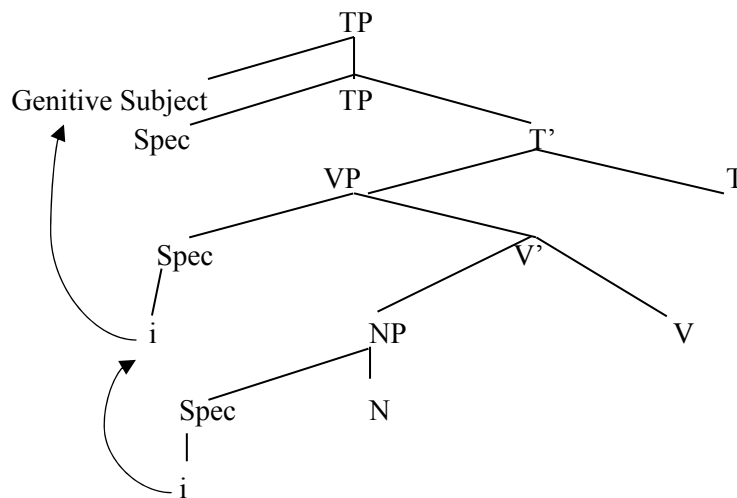
The features are also checked respectively.

References

Chomsky, N. (1981). *Lectures on Government and Binding*. Foris: Dordrecht.
Jayseelan, K. A. (2000). *IP-Internal Topic and Focus Phrase*. CIEFL: Hyderabad.
Keenan, E. (1976). *Towards a Formal Definition of 'Subject'*. Academic Press: New York.
Mohanan, K.P. and T. Mohanan (1988). *Dative Subjects in Malayalam: Semantic Information in Syntax*. Paper presented at 17th South Asian Conference, Madison.
Mohanan, T. (1994). *Argument Structure in Hindi*. Standford: CSLI.
Nath, D.K. (2013). *Experiencer Subject Constructions and Genitive Case in Assamese*. RSIRJLE: Gwalior.

[46]   *Domaaki, an Indo Aryan Endangered Language: A Case of Language Loss Caused by Socio-Economic Inferiority Complex* ― Abdul Qadir Khan, The University of Azad Jammu and Kashmir, Muzaffarabad, Pakistan

Domaaki language is spoken in the Northern Areas of Pakistan. This language is spoken by a small community in Hunza district of Gilgit-Biltistan. The present study aims to analyze the degree of endangerment and factors behind it in multicultural context. For this purpose, a sociolinguistic survey was conducted that involved interviews and narratives of the subjects who were the native speakers of the said language. Ten native speakers were given a questionnaire which meant to examine the competency of parents and their school going children in their first language. They were also interviewed about their attitude towards their first language. Four language speakers were requested to narrate their culture, customs and language. The results reveal that the parents can speak their first language and they consider it their linguistic identity but the children are losing their first language rapidly. The results also show that Domaaki is critically endangered and facing the threat of being dead in a few years to come. Only sixteen speakers were found who could speak Domaaki fluently. Among sixteen, fourteen speakers are residing in district Hunza while two speakers are residing in district Nagar. The study also shows that these speakers do not speak Domaaki with their children or grandchildren. Although the second generation understands the language, but none of them was found to be a fluent Domaaki speaker. The younger generation has shifted to Burushaski since it is the mode of communication, trade and education in their surroundings. The study also reveals that the cause of this language loss is the inferiority complex associated with the members with this community. The shift towards Burushaski (the dominant language) caused a drastic effect on Domaaki and it is feared that Domaaki language will die with the death of these elderly Domaaki speakers.

[47] *Classification of Mood and Modality in Meeteilon* ― Padmabati Achom, University of Delhi, Delhi, India

The terms mood and modality are used by the grammarians and the linguists in different ways. These term "mood and modality" are often used interchangeably. In this paper, I will discuss how the mood and the modality are expressed in Meeteilon, a Tibeto-Burman language family spoken in the North East state of Manipur, India. Unlike English, Meeteilon neither has an auxiliary verb nor a modal verb. Meeteilon is an agglutinating language, hence various morphemes are affixed to the verbal roots to give the mood and the modality interpretation.

Mood in Meeteilon is expressed through the verbal affixes as in (1) while the modal system (modality) in Meeteilon is expressed through the modal roots as in (2), the double negations as in (3), etc. This will be further discussed in the following chapters.

(1) cə-ru-**ro**   **Imperative mood**
     eat-DEIC-Imp
     'Eat'
     Literal: Go and eat.

(2) John cət-pa   **ya**-i   **Epistemic possibility**
     John go-INF   Modal root-Asp
     'It is possible for John to go.'/ 'John may go.'

(3) naŋ   čat-**ta**-ba   ya-**de/-roi**   **Deontic Necessity**
     you   go-Neg-INF   Modal root-Neg
     'You must go. / You must have to go.'
     Literal: 'You can't say can't go.'

However, the modal root **ta-** is ambiguous as it expresses the deontic modality as well as the stative verb 'hear' when the embedded clause is non-finite.

(4) mahak gari manuŋ-da tum-**ba** **ta**-i
  he/she.3P vehicle inside-LOC sleep-INF MRoot/hear-Sasp

M1: 'It is necessary for him to sleep inside the vehicle.'   **Deontic**
  (as he has no place to sleep.)
M2: (I) hear the sound of his sleeping inside the vehicle.   **Declarative**

Now, when the modal root **ta-** takes a finite embedded clause, the modality interpretation is lost and the root *ta-* only interprets the stative verb 'hear' as shown below:

(5) mahak gari manuŋ-da tum-**me** (hayna) **ta**-i
  he/she.3P vehicle inside-LOC sleep-Perf that.COMP hear-SAsp
  'I hear/d that he sleep/slept inside the vehicle.'

Based on the behaviour of the root *ta-* in (4) and (5), it can be concluded that a modal interpretation is possible only if the embedded clause structure is non-finite. However, if the embedded clause is finite, the sentence cannot convey modality.

Based on Embick (2015), this could be due to the fact that the root $\sqrt{TA}$ is categorized differently as a 'Modal' by the categorizer *m*, and as a 'Verb' by the categorizer *v* respectively as shown below:

(6)
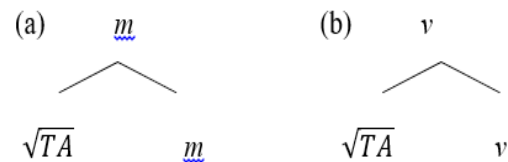
This paper will further study a possible syntactic analysis of the modality in Meeteilon from the perspective of the Minimalist Program, the Distributed Morphology and the Exoskeletal model.

References
Achom,P and Bhattacharya, T. 2015. Modality and Phase Effect of *-rəm/ləm-* in Meeteilon. Paper presented at the International Conference On Syntactic Typology: Language Contact and Convergence in NEHU, Shillong, November 23-24.
Afarli, T.A. 2015. Exoskeletal analysis as s framework for the understanding of language mixing phenomena. Delhi University.
Chelliah, S. L. 1997. *A Grammar of Meithei*. New York: Mouton de Gruyter.
Depraetere, I and Reed, S. 2006. Mood and Modality in English. In *The Handbook of English Linguistics*. Aarts, B and McMahon, A (ed): Blackwell Publishing Ltd.
Embick,D. 2015. *The Morpheme: A theoretical Introduction.* Germany: De Gruyter Mouton.

[48] *Pronouns and Reflexives in Spiti* — Yangchen Roy, Jawaharlal Nehru University, New Delhi, India

This presentation will give a detailed description of the pronominal and reflexive systems of Spiti[3]. The morphological structure of the pronouns and reflexives in Spiti will be discussed in light of Reinhart and Reuland (1993); also described will be the agreement pattern found between pronouns/reflexives, and the speaker, addressee [similar to that found in Malay and Thai, as inferred from (Smyth, 2002, p. 108) and (R.O.Winstedt, 1913, p. 41) respectively] and referent.

Reinhart and Reuland (1993) distinguish between what they call SE anaphors and SELF anaphors. The morphologically simplex anaphors, known to be long distance anaphors, are termed SE anaphors. The morphologically complex ones, known to be local anaphors, are called SELF anaphors. SE anaphors and SELF anaphors have different structural composition [see (1)].

(1) Examples (2) and (3) of Reinhart and Reuland (1993, p. 658):
    a.   SE anaphors: [$_{NP}$ SE [$_{N'}$... e...]]
    b.   SELF anaphors: [$_{NP}$ Pron/SE [$_{N'}$ self]]

Spiti has distinct first, second and third person pronouns, each agreeing in formality/politeness and number. Plural pronouns are followed by the appropriate number/quantifier morpheme[4]. First person pronouns in Spiti agree with the addressee in the level of intimacy/formality shared between the speaker(s) and the addressee(s); they also agree in number, but only with the speaker(s). Existing descriptive literature on Spiti (Sharma, 1992) does not note most of the observations made here, including that on allocutive agreement. Second person pronouns agree in number with the addressee and in the level of intimacy/formality shared between the speaker(s) and the addressee(s) with the addressee. Third person pronouns agree in number and intimacy/formality with the referent. See (2) for an illustration[5].

(2) ŋu   ŋ̌a   kʰja   sumbu kʰo
    1.SG.FM 1.SG.IFM 2.PL.IFM three   3.SG.IFM
    'I'   'I'   'you three'   'she/he'

Reflexives in Spiti show the same agreement pattern as pronouns, with the pronominal part of the anaphors manifesting this agreement. This agreement pattern holds for pronouns and reflexives in all structural positions: subject, direct object, indirect object, specifier of DP/NP and other adjunct positions.

As evident from (1b), SELF anaphors are composed of two parts, a reflexive part (self), which is an N, and a pronoun determiner or SE determiner. Spiti SELF anaphors are composed of a pronoun determiner followed by a reflexive part[6], as exemplified in (3).

(3) ŋu-raŋ   kʰa-raŋ   kʰɔŋraŋ
    1.SG.FM-REFL 2.PL.IFM-REFL 3sg.IFM-REFL
    'myself'   'yourselves'   'himself/herself'

---

[3] Spiti (called *piti-bʰoʈi* by the speakers) is a Western Tibeto-Burman language spoken in some of the valleys of the district of Laul and Spiti in the northern state of Himachal Pradesh in India. The language participants who provided data for this work are from the Pin valley.

[4] Spiti pronouns do not show gender agreement.

[5] Glossing abbreviations: 1-1st person, 2-2nd person, 3-3rd person, SG-singular, PL-plural, FM-formal, IFM-informal, INCL-inclusive, REFL-reflexive, FAM-belongs to the possessor's family, NFAM- does not belong to the possessor's family, DIST-distal, PROX-proximal, GEN-genitive case, OBJ-object argument marker

[6] Spiti phrases are right headed, like that of most south Asian languages.

Anaphors in Spec DP, which would be suspect SE anaphors, however, do not pattern with (1a). They are composed of a pronoun, followed by a reflexive marking morpheme, -ʒar-, when the possessee is someone/something part of the possessor's family, or -r-, when the possessee is *not* someone/something part of the possessor's family. This is followed by the genitive case marker, -i [see (4a)]. Pronominals in Spec DP are distinct from reflexives in Spec DP. The pronominals have the following structure: pronoun, followed by a morpheme which indicates whether the possessee is someone/something part of the possessor's family[7] or not, followed by the genitive case marker [see (4b)].

(4) a. ɲu-ʒar-i   həu-r-i   kʰɔŋ-r-i
         2PL.IFM-FAM.REFL-GEN   1PL.IFM.INCL-NFAM.REFL-GEN   3SG.FM-NFAM.REFL-GEN
         'your'   'our'   'his/her'

     b. ɲa-sumbu-t-i   kʰu-ʒ-i   kʰuŋ-b-i
         2.PL.IFM-three-GEN   3.SG.IFM-FAM.PROX-GEN   3.SG.FM-FAM.DIST-GEN
         'your'   'his/her'   'his/her'

That the *-r-i* forms are reflexives is further attested by the fact that they, unlike the *-t-i* forms in Spec DP, must obligatorily be bound, as illustrated in (5).

(5) a. rinzin$_i$ əli$_j$ lə   kʰu-r-i$_{i/*k}$ bari   lə   laptaŋba
         Rinzin$_i$ Ali$_j$ OBJ 3.SG.IFM-NFAM.REFL-GEN about OBJ   spoke

         'Rinzin$_i$ spoke to Ali$_j$ about herself$_{i/*k}$.'

     b. tashi$_i$ karma$_j$ nə   kʰʉti $_{*i/j/k}$ petʃa kɔksoŋ
         Tashi Karma   from 3.SG.IFM-NFAM-GEN   book snatched
         'Tashi$_i$ snatched his/her$_{*i/j/k}$ book from Karma$_j$'

While Reinhart and Reuland (1993) in their description of the structure of SE and SELF reflexives did not allude to agreement percolating inside the anaphors' structures, the data from Spiti suggest that this is indeed a possibility. A detailed description of the pronoun and anaphora systems[8], as summarised above, will help propel analyses of agreement in the Spiti nominal domain.

References

Reinhart, T., & Reuland, E. (1993). Reflexivity. *Linguistic Inquiry*.
R.O.Winstedt. (1913). *Malay grammar*. Oxford.
Sharma, D. (1992). *Tribal languages of himachal pradesh* (1st ed., Vol. 2). Mittal Publications.
Smyth, D. (2002). *Thai: An essential grammar*. Routledge.

[49] *Bangla, Hindi, and Mee/iteilon Polar and Alternative Questions* — Tanmoy Bhattacharya, University of Delhi

This paper first presents an empirical comparison of Bangla and Hindi polar questions to illustrate the idea that Wh- and Yes/No- are two ways of executing the same strategy—the reason perhaps why these two types of questions utilize the same particle, namely, a Wh word (*kyaa* for Hindi, and *ki* for Bangla) (see 1a,b). The abstract question template for both a Wh- and a Yes/No-question is claimed to be identical (2).

---

[7] two in the third person, based on proximity of the possessor and the speaker: -ʒ- for proximal and -b- for distal
[8] Spiti also has verbal reflexives; however, discussing them is beyond the scope of this work.

(1) a. Ravi **kyaa** karegaa?　　a'. Robi **ki** korbe? Wh-question H/B
　　　Ravi what do.fut.3sm　　　Ravi what do.fut.3
　　　"What will Ravi do?"
　　b. **kyaa** Ravi naacegaa?　　b'. Robi **ki** nacbe? Y/N-question H/B
　　　Y/N Ravi dance.fut.3sm　　　Ravi Y/N dance.fut.3
　　　"Will Ravi dance?"
(2) WH/Y-N (Ravi do)?

Since a Wh-question is an information seeking question, the subject moves out to indicate the correct scope. In polar questions, movement of the polar particle to the periphery is for reasons of clause typing. However, in Bangla Y/N-questions, the Y/N operator cannot move out to the (left) periphery, unlike in Hindi.

I will use this difference between Hindi and Bangla to in fact claim that Bangla polar questions are not polar questions but are questions about Topics. In addition, I will bring in Mee/iteilon to provide support for this conclusion. To implement this difference syntactically, I will suggest that Bangla Y/N-question particle is not an instantiation of C[Q] but rather is at the Top-head with a [uTOP] uninterpretable feature that is absent in Hindi, where the Y/N-question particle carries a [uWH] uninterpretable feature. As a result of this difference, in Bangla, the subject raises to [Spec,TopP] position, fashioning the so-called 'Subject-Aux inversion', whereas in Hindi, a C-head with a [Q] feature simply requires an overt movement of the Wh to the C^0-domain to produce the order in (1b). In effect, the claim is that the so-called Y/N question marker *ki* in Bangla is really composed of [Wh+*about*], i.e. we can break up a Y/N question as: *What about Ravi? Will he dance?* That is, in Bangla the polar question has diagnostic of a bi-clausal cleft construction. The essential bi-clausality is supported by a real cleft language, Mee/iteilon, where all polar questions have a pre-final morpheme indicating 'doubt' (glossed as dub below):

(3) Ravi　jagoi saa-ga-d-ra?
　　Ravi　dance dance-fut-**dub**-int
　　'Will Ravi dance?'

This example can be roughly translated biclausally as *I doubt whether Ravi will dance*. Like in Mee/iteilon Wh- questions, the question intonation is neutralised in the biclausal reading, unlike in a "pseudo"-cleft language like Bangla, where the biclausal version retains the question intonation (*What about Ravi? Will he dance?*).

The difference between the polar question strategies in Bangla and Hindi is represented below:

(3) a. [CP [TopP *robi* [Top *ki* [TP *t_robi* *nacbe*]]]] (Bangla)
　　b. [CP [C *kyaa* [TP *ravi* t *nacegaa*]]] (Hindi)

Thus, the analysis of Bangla polar questions should proceed along the following lines, using the Verb-medial order in line with Simpson and Bhattacharya (2003):

(4) [TopP 　 [TOP *ki*] [CP 　 [C ABOUT] 　 [　 T [vP *robi*　*nacbe*]]]]

Here the subject generated in [Spec,vP] moves to [Spec, TopP] finally in order to meet the requirement that Bangla subjects are topic-like (Simpson & Bhattacharya 2003), whereas C moves to the TOP head to produce the polar marker *ki*, which therefore always ends up in the second position (or lower) but never in

the sentence-initial position. By this logic the Hindi subjects are not topic-like and do not therefore move to a higher position (3b).

Unlike Polar questions, Alternative questions or AltQs, seem to offer a choice which is unbiased, between the two alternatives offered by the use of the disjunction. Such questions involve a strong exhaustivity presupposition for the alternatives as opposed to the polar questions (Biezma and Rawlins, 2012). The table below shows the difference between the two types of polar questions in Bangla and Hindi, and are compared against English:

	ENGLISH	Bangla	Hindi
ALTQ	*Does Ravi want coffee or tea?*	*robi kOfi khabe na (ki) ca?*	*R kOfii piyegaa yaa caay?*
PolarQ	*Does Ravi want coffee?*	*robi (ki) kOfi khabe?*	*(kyaa) R kOfii piyegaa?*

There are clear prosody differences between the two types of questions, in terms of their boundary tones (falling for AltQs) and phrase tones. In Bangla, the marker for AltQs can be *na* or *na ki*. This state of affairs in Bangla AltQs is much more complicated than in Hindi, which only uses the disjunctions marker *yaa* 'or'. Since in AltQs the alternatives are exhaustive, a final falling intonation on a sentence indicates the existence of an exhausitivity operator at LF for AltQs. Bolinger's (1978) observations regarding intonations in Polar/ Alternative questions, has been treated by van Rooy and Šafářová (2003) in terms of a decision-theoretic framework. For them, the 'utility value' for all the answers to AltQs is equal, i.e. no preference is given to one as opposed to the other, though for a PolQ the utility value for the right answer is higher than its negation. In Bhatt & Dayal (2014), the difference is captured as follows:

(5) a. [$_{CP}$ OP$_{Y/N}$ [IP]] (POLQ)b. [$_{CP}$ OP$_{whether-i}$ [IP … t$_i$ […or…]]]   ALTQ

Both the C heads are [+WH], but the nature of the operators differ; the Y/N Op is null according to them, whereas the OP for AltQ is also null but there are more things going on with the C there—there's always an accompanying *either* as a scope marker with *or*, which head-moves to a [+WH] C where *kyaa* is generated, and the combination results in *whether* (Larson 1985, Han & Romero 2004, a.o.). This matches with *ki* in Bangla (the Hindi *ki* facts are not so clear). In the data below, we see that Hindi uses *ya* for both AltQ and AltQvN (cf. (6a)), but Bangla uses the templates X or Y (see (6b)) or X or not (as in (6c)):

(6) a. X *ya* Y (X or Y); X *ya nahiiN* (or not)
    b. tumi ki   ca khabe na (ki)   kOfi (khabe)
       you What tea eat.will or (what) coffee (eat) "Will you drink tea or coffee?"
    c. tumi (*ki) ca khabe   ki   na (khabe)
       you   Wh   tea eat.will what neg (eat.will) "whether you will drink tea or not"

We can thus claim that whenever a polar question is embedded by a rogative predicate (*wonder, ask*), which typically always takes a question as a complement, an AltQ results; this also shows that Bangla *ki* is different from Hindi *kyaa*. This difference can be shown to be captured in terms of a syntactic analysis that derives the Polar Wh *ki* by movement of *either/ about* into a +WH C head, while being coindexed with a covert *or* inside the TP. Based on the fact, that one must always prepose something in front of *ki*, and the proposal that Bangla always requires something in the specifier position, I assume that *tumi* needs to be topicalized but the whole clause is pied-piped with it. In common with other proposals, TP is the nucleus proposition and C^0 decides whether there is a proposition or set of propositions. Due to reasons of clause typing, which is done from the C position, *ki/ kyaa* has to be above C^0.

References
Bhatt, Rajesh & Veneeta Dayal. 2014. Polar kyaa: Y/N or Speech Act Operator. Paper presented at the Workshop on Non-Canonical Questions and Interface Issues at the Kloster Hegne Universitat Konstanz, February 18.
Biezma, María & Kyle Rawlins. 2012. Responding to alternative and polar questions. *Linguistics and Philosophy*, Vol. 35.5, pp. 361-406.
Bolinger, Dwight. 1978. Yes-no questions are not alternative questions. In H. Hiz Ed., *Questions*, pp. 87-105. Dordrecht: Reidel Publishing Company.
Chomsky, Noam. 2013. Problems of projection. *Lingua* 130:33-49.
Han, Chyung, & Maribel Romero. 2004. The syntax of Whether/Q...or questions: Ellipsis combined with movement. Natural Language and Linguistic Theory, 22.5, 27-564.
Larson, Richard. 1985. On the syntax of disjunction scope. *Natural Language and Linguistic Theory*, 3, 217-26.
Simpson, Andrew & Tanmoy Bhattacharya. 2003. Obligatory Wh- Movement in a Wh-in-situ Language. *Linguistic Inquiry* 34.1: 127-142.
van Rooy, R., & Šafářová, M. 2003. On polar questions. In R.Young & Y. Zhou, Eds., *Semantics and Linguistics Theory* 13. Ithaca, NY: Cornell University.

[50]   *Typo-syntactic Differences among Hindi, Maithili, and Bangla* ─ Prashant Priyadarshi, IIT, Varanasi; Samapika Roy, IIT BHU, India; Sukhada Priyadarshi, IIT BHU, India

The objective of this paper is to study the fundamental typo-syntactic differences among the genealogically-related Indo-Aryan languages: Hindi, Maithili, and Bangla. Being the members of the same language family, what is it that makes them different from one another? This is the key question this paper deliberates on. This study is based on the typological and syntactic features of the three languages in the discussion. The work focuses on qualitative typology to find out the cross-linguistically viable notions that provide the description and comparison of these individual languages.

Despite being sister languages, these languages behave differently. For instance, the morphosyntactic alignment of Hindi is ergative-absolutive while Maithili and Bangla follow the nominative-accusative pattern. A comparative study has been done on the basis of some of the typo-syntactic characteristics of these languages like complementation (placement of 'that'), ergativity (ergative marker 'ne'), relative clauses, wh-questions, negation, pro-drop, conjunctive participle, nominalization etc. For example, if we take ergativity, Hindi shows this phenomenon in past perfective constructions where the case marker 'ne' is assigned to the subject (agent) of the transitive verb (Piepers, 2016) while Maithili and Bangla do not show the phenomenon of ergativity. Let us look at it through an example:

(1)   a. Hindi- mæ̃-ne əpnā   dʒīvən nərk bənā lijā   hæ
                 I+Erg I+Poss.+Ref. life   hell   make Pst+Perf. Aux.
                 'I have made my life hell.'
      b. Maithili- həm   əpən   dʒībən nərək bənā nenē   ʧʰī
                   I(Nom) I+Poss.+Ref. life   hell   make Pst + Perf. Aux.
                   'I have made my life hell.'
       c. Bangla- āmi   āmār   jibɔn nɑrɔk bāniyeʧʰi
                  I(Nom)   I+Poss.+Ref. life   hell   make+perf
                  'I have made my life hell.'

As we can see, the ergative marker in Hindi is 'ne' which always comes with the agent. Maithili and Bangla do not have any ergative marker because ergativity is absent in both languages. In the given Hindi example 'mæ̃' is the agent of the sentence and ergative marker 'ne' is attached with it.

Another example of typo-syntactic differences among these languages is the negation element. It precedes the verb in Hindi and Maithili, whereas in Bangla, it follows the verb.\

(2) a. Hindi-   mæ̃   nəhĩ   kʰāũgā
                 I   neg   eat+FUT+M+sg
                 'I will not eat.'
    b. Maithili- həm   nəhi   kʰājəb
                 I   neg   eat+FUT
                 'I will not eat.'
    c. Bangla- āmi kʰābɔ   nā
                 I   eat+FUT neg
                 'I will not eat.'

Negation markers 'nəhĩ' and 'nəhi' in both Hindi and Maithili respectively mostly occur medially, whereas in Bangla, the negation marker 'nā' occurs at the sentence final position.

Over the years, research on Indo-Aryan languages has been going on. Gradually, NLP is spreading its wings and thereby less resource languages are also getting a platform. This paper tries to provide insights into the salient characteristics of above mentioned languages. This piece of work might be helpful for those interested in a typo-syntactic or comparative study of any of these languages. The typo-syntactic features described in this paper may help in creating language-independent NLP tools.

References
Chatterjee,S. K. 1926. *The origin and development of the Bengali language.* Calcutta: University Press/ Ann Arbor, Michigan: University Microfilms Reprints.
Crystal, D. 2003. A *Dictionary Linguistics and Phonetics.* Blackwell Publishing
Jha, Subhadra. 1958. *The Formation of Maithili Language.* London: Luzac and Co.
Kachru, Y. 1966. *An Introduction to Hindi Syntax.* Department of Linguistics, University of Illinois.
McGregor, R.S. 1995. *Outlines of Hindi Grammar.* Oxford: Oxford University Press.
Subbarao, K. V. 2012. *South Asian Languages: A Syntactic Typology.* Cambridge University Press.

[51]   *The Expression of Path of Motion In Nepali* ─ Krishna Parajuli Université Lumière Lyon 2, Laboratoire Dynamique du Langage (DDL) and CNRS, France

The purpose of this presentation is to investigate how native speakers of Nepali, an Indo-Aryan language (Dahal, 1974; Grierson, 1916; Masica 1991) spoken in Nepal by c. 11 million speakers (CBS 2011), express Path (one of the basic components of Motion events, the others being Figure, Ground, Motion, and Manner (Talmy, 2000: 25-26)) in spontaneous Motion events, that refer to a change of location in space (e.g. he entered the forest).

In order to investigate this domain, we used the video clips developed by Ishibashi *et al*. 2006, which consist of 76 video clips showing different types of moving FIGURE (e.g. adults, children), reference GROUND (e.g. forest, river), PATH (e.g. (in) to, (out) of), and MANNER (e.g. walk, run). We collected the data with 17 native speakers (aged 20-50) of Nepal, in the Parbat and Kathmandu districts (data collection: spring 2016-2017).

The data show that there are various morpho-syntactic resources (predicates, postpositions, adverbials, and/or case endings) available in Nepali to express Path of motion, and that Path can be conveyed by one morpho-syntactic element or be distributed across the clause in several morpho-syntactic loci. Based on this

observation, we show that four patterns of distribution can be identified. The first pattern is when Path is expressed by a case marker or a postposition alone instantiating a single locus as in (1) and (2) respectively. Secondly, the distribution of Path can occur in two loci, between the predicate and a postposition as is the case in (3) or between the predicate and a case marker as in (4). The third pattern shows the distribution of Path in three morpho-syntactic loci: between the case marker, an adverbial and the predicate as is illustrated in (5) or between the case marker, a postposition and the predicate as presented in (6). Finally, the fourth pattern presents the case where all the four morphosyntactic elements are combined to convey the meaning of Path; this is the case in the examples (7) and (8) which show the distribution of Path in the postposition, case marker, adverbial and the predicate.

(1) FIGURE GROUND-PATH MOTION-DEIXIS
     u   *jangalbaaTa*   *aai*
     u   *janggal-baaTa*   *aa-i*
     3SG   forest-ABL   come-PST.3SG.F.NH
     'She came from the forest.' [Traj_027_s21]

(2) FIGURE GROUND-PATH MOTION-DEIXIS
     u   *guphaabhitra*   *gai*
     u   *guphaa-bhitra*   *ga-i*
     3SG   cave-inside   go-PST.3SG.F.NH
     'She went into the cave,' [Traj_022_s22]

(3) FIGURE GROUND-PATH MOTION-PATH
     u   *janggalbhitra*   *chiryo*
     u   *janggal-bhitra* *chir-yo*
     3SG   forest-inside   enter-PST.3SG.M.NH
     'He entered the forest.' [Traj_026_s17]

(4) FIGURE GROUND-PATH PATH
     u   *oNaarbaaTa*   *niskyo*
     u   *oDhaar-baaTa*   *nisk-yo*
     3SG   cave-ABL   exit-PST.3SG.M.NH
     'He exited the cave.' [Traj_028_s15]

(5) FIGURE   GROUND-PATH   PATH   MOTION-PATH
     uni   *guphaadekhi*   *baaira*   *niklin*
     uni   *guphaa-dekhi*   *baahira*   *nikl-in*
     3SG.H   cave-ABL   outside   exit-PST.3SG.F.H
      'She exited the cave.' (Lit. 'She exited outside from the cave.') [Traj_023_s9]

(6) GROUND-PATH   GROUND-PATH   MOTION-PATH
     caurbaaNa   *janggalbhitra*   *pasdai*   *cha*
     caur-baaTa   *janggal-bhitra* *pas-dai*   *cha*
     meadow-ABL   forest-inside   enter-PROG COP.NPST.3SG.M.NH
     '(He) is entering (to) the forest from the meadow.' [Traj_057_s2]

(7) FIGURE   GROUND-PATH-PATH   GROUND-PATH   MOTION-PATH
     uni   *jangngalbaairabaaNa*   *bhitra*   *chire*
     uni   *janggal-baahira-baaTa*   *bhitra*   *chir-e*
     3SG.H   forest-outside-ABL   inside   enter-PST.3SG.M.H
     'He entered the forest.' (Lit. 'From outside the forest, he entered (inside) (it).' [Traj_056_s10]

(8) FIGURE   GROUND-PATH   GROUND-PATH   GROUND-PATH   MOTION-PATH
     uni   *jangngalbaaTa*   *baahira*   *caurmaa*   *niskin*
     uni   *janggal-baaTa*   *baahira*   *caur-maa*   *nisk-in*
     3SG.H   forest-ABL   outside   meadow-LOC   exit-PST.3SG.F.H

'She exited (from) the forest.' (Lit. 'From the forest, she exited (outside) (to) the meadow)). [Traj_027_s20]

In this talk, we will investigate these patterns and discuss (a) the combinability of different morpho-syntactic resources that contribute to the expression of Path, and (b) the types of fine-grained components of Path (e.g. Source, Goal, boundary-crossing) conveyed by these resources. The main aim will be to provide a comprehensive account of patterns of distribution in Nepali and their use in the expression of different types of Path (e.g. Source-oriented, Goal-oriented, with vs. without boundary-crossing).

Abbreviations
1 first person, 2 second person, 3 third person, ABL ablative, CBS Central Bureau of Statistics, F feminine, GEN genitive, GER gerundive, H honorific, LOC locative, M masculine, NH non-honorific, PL plural, PST past, s speaker, SG singular, Traj. Trajectoire

References

Dahal, Balllabh Mani. 1974. A description of Nepali literary and colloquial. Ph. D. thesis. India: University of Poone.
Grierson, G. A. 1916. *Linguistic survey of India vol. IX, part IV* (first edition). Delhi: Motilal Banarasidas.
Ishibashi, M., Kopecka, A. & Vuillermet, M. 2006, "Trajectoire : matériel visuel pour élicitation des données linguistiques", Fédération de Recherche en Typologie et Universaux Linguistiques.
Masica, Colin P. 1991. *The Indo-Aryan Languages*. Cambridge: Cambridge University Press.
Talmy, Leonard. 2000a. *Toward a cognitive semantics*. Vol. 1, *Concept structuring systems*. Cambridge: MIT Press.

[52] *Language Attrition and Language Shift: A Case Study of Magahi Speech Community of Patna* ─ Priya Saloni, Jawaharlal Nehru University, New Delhi, India

The problems in Second Language acquisition has always been acknowledged by the researchers in the field of linguistics, but the process of first Language attrition is a subject that has received much less systematic attention by the researchers. In the society like Patna with a diverse population, people from linguistic minority have to learn Hindi in order to assimilate with the educated society and to get the work opportunities because Hindi is the official and standard language in Patna. Therefore, shifting towards the dominant language is the only option left to them which sometimes leads to the language attrition. "Language attrition is a phenomenon where the loss of, or changes to, grammatical and other features of a language as a result of declining use by speakers who have changed their linguistic environment and language habits (Schmid,2011).

The Magahi Language belongs to the Indo-Aryan language family spoken mostly in the southern and western parts of Bihar. The present study is very different from the other research in the field of first language attrition, since most of the research has been done on the speech communities that are living in their L2 environment or mostly on immigrants of the different countries. But, in the case of Magahi community the speakers are living in the same L1 environment since, Patna itself is a Magahi speaking region. According to Priya(2018) "The Magahi community is not able to maintain their mother tongue in Patna. Having a large number of Magahi speakers in the capital city Patna, the situation of the Magahi speakers here is; almost like a terminal speech community than a healthy one. They are rapidly shifting towards Hindi or Eastern Hindi and the domains in which the community could have a full-fledged language use are becoming limited".

The aim of this work is to make a substantial study of the level of changes and reduction in the production, comprehension, and processing of the speaker's linguistic repertoire. The methodology is based on Schmid's format (2011) of conducting language attrition research in which the number of subjects is 60 i.e. 30 in the 'target group' and 30 in the 'control group'. The subjects were given five types of tasks called Picture Naming Task, Verbal Fluency Task, Grammatical Judgement Task, Free Speech Task, and Translation Task to test their mental lexicon, lexical diversity, grammar, and fluency. The results show that their mental lexicon and fluency is affected due to the infrequent use of Magahi in their regular domains. For example, in the verbal fluency task, the subjects were asked to name six items in Magahi from the following category i.e. colours, flowers, vegetables, trees, and household chores. So, the total no. of pure Magahi words given by the subject out of 1022 instances or words is 312 and the percentage of it is 30.52%(approx), which is unexpectedly very low in number. Another example is given in the table no. 1.1 which shows the results of the Free Speech Task in which five types of dis-fluency patterns were found i.e. repetitions, reframing, code mixing, code switching, and pauses. The difference among both the groups is very evident in all the tasks and those all have provided some clues about the patterns of changes or loss in the Magahi bilinguals of Patna. In the grammatical judgment tasks, target group has performed average compared to the other tasks. They have scored poorly in the verbal fluency task and in the analysis of lexical diversity also. The most frequent error or mistake is code-mixing in the disfluency pattern of the attriters.

References

Altenberg, E. P., & Vago, R. M. (2004). The role of grammaticality judgments in investigating first language attrition. *First language attrition. Interdisciplinary perspectives on methodological issues*, 105-129.

Grierson, G. A. (1919). *The linguistic survey of India and the census of 1911*. Superint. Gouvernm. Press.

Köpke, B., Schmid, M. S., Keijzer, M., & Dostert, S. (Eds.). (2007).*Language Attrition: Theoretical perspectives* (Vol. 33). John Benjamins Publishing.

Opitz, C. (2011). *First language attrition and second language acquisition in a second language environment* (Doctoral dissertation, Trinity College Dublin).

Priya, S. (2018). *The role of extralinguistic factors in Language Attrition of Magahi Community in Patna.* Unpublished manuscript. ICOLSI-40, CIIL, Mysore.

Schmid, M. S. (2011). *Language attrition*. Cambridge University Press.

Yagmur, K., Bot, K. D., & Korzilius, H. (1999). Language attrition, language shift and ethnolinguistic vitality of Turkish in Australia. *Journal of multilingual and multicultural development*, *20*(1), 51-69.

No. of participants	30 (Target Group)	30 (Control Group)
Total no. Sentences produced	309	314
Mean	10.3	10.6
Total Instances of Mistakes	140	17
Total no. Pauses	29	7
% of Pauses	19.46	41.1%
Mean	1.52	1
StD	0.85	0
Range	1-4	0
Total no. C-S	34	0
% of C-S	22.8%	0
Mean	1.7	0
StD	1.03	0
Range	1-4	0

Total no. C-M	51	3
Total % of C-M	34.2%	17.6%
Mean	2.1	1
StD	1.07	0
Range	1-5	0

Table no. 1.1: Table showing dis-fluency patterns in the free speech of TG and CG

[53]   *Degree-Achievement Verbs and their Light Verb combinations in Hindi-Urdu Complex Predicates: A First Phase Syntax analysis* ― Praveen Singh, IIT Madras, Chennai, India; Rajesh Kumar, IIT, Madras, Chennai, India

Complex Predicates (CPs) are a kind of V(erb)-V(erb) construction found in Hindi/Urdu (HU) and various other languages found in South Asia. The term CP has also been used by scholars for various other kinds of constructions such as the N(oun)+V, A(djective)+V and also A(dverb) +V constructions (cf. Hook 1974; Butt 1995; Mohanan 1994; Mohanan 2007 for Hindi-Urdu). We assume Butt's (1995: 2) definition of a CP for this paper which focuses only on the V-V constructions in HU where the first verb in the construction may be referred to as the M(ain) V(erb) and the second verb is referred to as the L(ight) V(erb). Of these V-V constructions, we find a sub-type that are made up of verbs that we classify as degree-achievement verbs in HU (following Ozarkar 2014's classification for Marathi) which combine with only a specific subset of Light Verbs in HU.

We use the aspectual or event structure (properties) as proposed in Ramchand's (2008) First Phase Syntax approach (FPS) to account for such CPs in Hindu-Urdu which are made up of a Degree-Achievement MV and an LV. FPS assumes a vP that is decomposed into init(iator), proc(ess), and res(ult) projections after the X-bar syntax. Ozarkar observes that degree-achievement verbs are a kind achievement verbs which are not punctual, instead they "show gradual, incremental progression" (2014: 156). Examples of degree-achievement verbs in HU are *ghul* (dissolve), *suukh* (dry), *bhiig* (get wet), *pighal* (melt), etc. These occur not only with the interval adverbial phrases 'in X time' but also with the durative adverbial phrases 'for X time' which separates them from true achievement verbs and also reveals their (a)telic properties. Ozarkar (2014: 160), modifying FPS analysis, argues that these kinds of verbs are [init, proc, (res)] or [proc, (res)] type depending on whether they are the transitive or unaccusative kind.

These verbs occur in HU Complex Predicates with only a minor subset of available Light Verbs such as *jaa* (go), *uth* (rise) and *do* (give). For instance:

1a.) barf paanc minute   meM pighal-ii
       Ice   five   minute   in   melt-perf.sing.fem.
       'Ice melted in five minutes'
1b.) barf paanc minute   meM pighal gay-ii
       Ice   five   minute   in   melt   go-perf.sing.fem.
       'Ice melted in five minutes'

The interval-time adverbial phrase 'paanc minute meM' also seems to have an impact on the acceptability of the sentence if we remove the post-position 'meM' in (1b). There comes a change in the meaning of (1a) if the post-position 'meM' is removed but the sentence remains acceptable. The use of other kinds of time adverbial phrases also seem to show a difference in the distribution and the semantics of the sentences carrying these simples degree-achievement verbs and the complex predicates made with them.

We look at the aspectual or event structure properties of some of these degree-achievement verbs and of the light verbs they combine with to account for the CPs and the constraints on them that we find in Hindi-Urdu. We hope that the syntactic-semantic properties of the both the simple degree-achievement verbs and the complex predicates will help us further understand their behaviour in Hindi-Urdu and help us understand the CP phenomenon better in future.

References

Butt, Miriam. 1995. *The Structure of Complex Predicates in Urdu*. Stanford: CSLI Publications.

Butt, Miriam. 2010. "The light verb jungle: still hacking away". In: Amberber, M., Baker, B., & Harvey, M. *Complex Predicates: Cross-linguistic Perspectives on Event Structure*. Cambridge: Cambridge University Press, 48-78.

Hook, Peter E. 1974. *The Compound Verb in Hindi*. Ann Arbor: Center for South and Southeast Asian Studies, University of Michigan.

Mohanan, Tara. 1994. *Argument Structure of Hindi*. Stanford: CSLI publications.

Mohanan, Tara. 2007. "Grammatical verbs (with special reference to light verbs)". In Martin Everaert and Henk van Riemsdijk, (eds), *The Blackwell Companion to Syntax*, vol. II: 459-492. Blackwell Publishing.

Ozarkar, Renuka. 2014. *Structures of Marathi Verbs*. Unpublished Doctoral Thesis submitted to Mumbai University, Mumbai.

Ramchand, Gillian. 2008. *Verb Meaning and the Lexicon: A First-Phase Syntax*. Cambridge: Cambridge University Press.

[54] *Towards Contextualizing English in South India: Some Preliminary Findings of Phonological Variations* — Elizabeth Eldho, Indian Institute of Technology, Madras, Tamil Nadu, India

This paper explores the phonological variation in the English spoken in the southern part of the multilingual and multicultural nation, India in the South Asia. English language has been studied from a wide range of perspectives and a number of studies (Kachru 1983,1986,1996, Crystal 1997,Trudgill 1999,Quirk 1988,1989,Schneider 2007) have been carried out on several aspects of non-native varieties of English. English is no more a homogeneous entity for it functions in diverse sociolinguistic contexts from the sixteenth century to the present era. Similar is the situation in India where English as L2 has is undergoing changes functionally and formally. The English spoken in South India, as this paper explores, shows variation in the production of rounded, back vowels /ɒ/ and /ɔː/.They are marked for replacing these sounds with unrounded vowel /aː/. The informants included people belonging to the Southern parts of India, mainly from the Indian states namely Kerala, Tamil Nadu, Andhra Pradhesh, Telangana and Karnataka. As far as the research methodology is concerned, the casual, semi-casual and careful speech of the participants have been recorded, transcribed, analysed and also verified with the speeches of the speakers from other Indian states. The observation indicates that variation is mostly noted in the casual speech, less noted in the semi-casual and rarely in the careful speech. Moreover, interesting evidences of the subjects trying to polish their pronunciation in the semi-casual and careful speech are also considered. Thus, the study aims at understanding the linguistic variation in correlation with social factors such as age, sex, educational background, economic status and the ways in which English functions within a specified context. The study concludes that the non-native varieties of Englishes are on the rise with own distinctive features that are identity marked, both linguistically and regionally.

References

Agnihotri, Rama Kant, A.L Khanna. (1997). *Problematizing English in India*. New Delhi: SAGE Publications.

Agnihotri, Rama Kant & Rajendra Singh (eds). (2011). *Indian English: Towards a New Paradigm*. New Delhi: Palgrave Macmillan.

Dasgupta, ProbaL. (1993). *The Otherness of English: India's Auntie Tongue Syndrome*. New Delhi: SAGE Publications.

Crystal, D. (2004). *The Cambridge Encyclopaedia of the English Language*. Ernst Klett Sprachen.

Crystal, D. (1997). *English as a Global Language*. Cambridge: Cambridge University Press.

Emeneau, M. (1956*). India as a Lingustic Area*. *Language, 32*(1), 3-16. doi:10.2307/410649

Kachru, Braj.B. (1965). *The Indianness in Indian English*. *Word,* 21(3), 391-410. doi: 10.1080/00437956.1965.11435436

Kachru, Braj.B. (1983). *The Indianization of English: The English Language in India*. Delhi: Oxford University Press.

Kachru, Braj.B. (1986). *The Alchemy of English: The Spread, Functions and Models of Non-native Englishes*. Delhi: Oxford University Press.

Kachru, Braj.B. (1996). *World Englishes: Agony and Ecstasy*. Journal of Aesthetic Education, 30 (2), 135-155. Retrieved from: http://www.jstor.org/stable/3333196.

Labov, William. (2006). *The Social Stratification of English in New York City*. 2nd edition. Cambridge: Cambridge University Press.

Mesthrie, Rajend & Rakesh M. Bhatt. (2008). *World Englishes*. Cambridge: Cambridge University Press.

Quirk, R. (1988). *The Question of Standards in the International Use of English*. In P.H Lowenberg (Ed.), Language spread and language policy. Washington DC: Georgetown University Press.

Schneider, Edgar W. (2007). *Postcolonial English: Varieties around the World*. Cambridge: Cambridge.

Trudgill, Peter. (1999). *Standard English: The Widening Debate*. In Tony Bex & Richard J. Watts, (Eds.). London: Routledge.

[55]   *Towards semantic and structural analysis of Multiword Expressions in Bangla* ─ Swagata Acharya Linguistics Research Unit, Indian Statistical Institute, Kolkata

Multiword expressions are one of the serious area of concern for recent researchers in Natural Language Processing. MWEs are typically defined as a consecutive sequence of lexemes, which are idiosyncratic in nature; such idiosyncrasy may be lexical, syntactic, semantic, pragmatic or statistical (Baldwin and Kim, 2010). MWEs cross word boundaries and may bear both idiomatic and compositional meaning. Despite the fact that MWEs cannot be derived from its component words, they behave like any other phrase in a sentence- they take inflections, undergo syntactic operation etc. Though MWEs are easily mastered by native speaker, it becomes considerably difficult for machines to automatically detect, analyse and interpret them. As MWEs are very frequent and abundant in a language thus their interpretation is of immense importance in the present scenario.

This paper attempts to classify and analyse the MWEs present in Bangla. A detailed hierarchical classification ranging from idiomatic expressions, proverbial expressions, institutionalised expressions, proper names, verbal compounds, nominal compounds, reduplications, collocations, set expressions, onomatopoeic expressions, numeral adjectives etc. other than this thematic classification, attempts are also being made on making a structural classification of such MWEs. This classification is used to create a lexical database of Bengali MWEs which in turn will be used to make a specialised digital dictionary of MWEs in Bangla. For the analysis part, the Multiword Expressions are manually extracted from TDIL corpus of Bangla. The TDIL corpus has been preprocessed by tokenising, lemmatising and POS tagging it. The mwetoolkit analyses the whole corpus on the basis of four statistical tests – the maximum likelihood estimator, Dice's coefficient. the pointwise mutual information and Student's t-score.

Due to their idiosyncratic nature it becomes essentially tough for automated analysis systems to interpret these immensely important linguistic units. In the attempt to manually analyse MWEs in Bangla and then feeding this information wisely to the machines could lead to easy handling of language specific linguistic issue. It is found out that verbal compounds, nominal compounds and reduplication of various types are

immensely frequent in the TDIL corpus. Results will be more reliable if the size of the corpus is much more high. As Bangla is a highly inflected language, it needs much more focus and attention while dealing with such abundantly available linguistic elements.

References

Balwin, Timothy and Kim. 2010. Multiword expressions. In Nitin Indurkhaya and Fred J. Damerau (eds.), *Handbook of Natural Language Processing,* 2nd edn., 267-291. Boca Raton: CRC Press.

Bhattacharya, K. 1993. *Bengali-Oriya Verb Morphology: A Contrastive Study*. Kolkata: Das Gupta and Co., Private Limited.

Paul, S. 2004. *An HPSG Account of Bangla Compound Verbs with LKB Implementation*. PhD Dissertation , University of Hyderabad, Hyderabad.

Bauer, L. 1983. *English Word-formation*. Cambridge, Cambridge University Press.

[56]   *Shifting Tones in India's Language Policy in Education* — Hindolee Datta, Jawaharlal Nehru University, New Delhi

Language policy in education in India has been a matter of contention and subject of constant scrutiny since the publication of Macaulay's Minute in 1835 that upheld English above all other spoken vernaculars not least for practical convenience. Since then, schools beginning from the primary level have seen the adoption of a three-language policy to be able to navigate the multilingual plane and enable access to a fairly uniform education for all.

However, the linguistically heterogeneous nature of the different states (that were demarcated on linguistic grounds post-independence) makes even the recommendation of adopting three languages specific to each state fraught with complications. Not only is there a need to factor in the different dialects of languages of the eighth schedule but also the large number of tribal dialects and languages that have no script of their own.

The Indian school system, divisive as it is in its politics of caste, class, gender and approach, has the medium of instruction defining the course of all these fault-lines. The primary reason for learning difficulties arising in students, especially in tribal areas and low economic backgrounds, is that of a medium of education being other than their mother tongue which results in a process of alienation. This ensures that rote learning becomes the only way and these schools often see a high drop-out rate.

Impeccable knowledge and competence in English has always been the gold-standard for determining the respect and importance one commands in the social, cultural, political, economic and academic spheres. In such a scenario, a carefully structured language policy and curriculum needs to be put in place – one that is sensitive to the variety of unique needs as well as problems facing each area/state so as to ensure proper integration of students who can be capable of competing on an equal plane across all junctures.

However, in recent times, language policy going forward in a multilingual India still focuses on three-language formula which implements Hindi as the prime language across the length and breadth of the country, even when it is spoken and understood by only 44 per cent of the total population [Census of India, 2011]. Given its increasing move towards homogenisation through Hindi and the politics of naming this new education policy under the *Bharatiya Shiksha Mission,* one has to be aware and wary of the changing shades that direct such shifts.

This paper seeks to examine the theoretical underpinnings of such a move by contextualising the State's priorities as well as the ideological implications it entails in the present. "Research and innovation" seem to be the buzzwords guiding policy makers at the Ministry of Human Resource and Development, and an unhealthy obsession with ranking that gives importance to certain result-oriented parameters more than others (quantitative rather than qualitative). This has allowed for the language question to be pushed to the back-burner, doing only the bare minimum, guided by populism.

It is paradoxical that education in India that has been historically multilingual in its means of dissemination during the pre-colonial era would even now be directed towards the triadic mode, given the present government's dispensation to promote "traditional" Indian culture that was unsullied by agents of colonisation and modernity. In the 21st Century when multilingualism and cosmopolitanism go hand in hand, it seems counterintuitive and counterproductive to take a move inwards (and backwards) for it does nothing to alleviate the condition of the people who were originally losing out because of ill-thought-out language policies in the first place.

References

Agnihotri, R. K. "Towarrds a Pedagogical Paradigm Rooted in Multilinguality." Taylor and Francis Online (2007): 79-88.

Ahmad, Aijaz. In *Theory: Classes, Nations, Literartures*. London: Verso, 1992.

Bernstein, Basil. "On the Classification and Framing of Educational Knowledge." 1971.

Buhmann, Dorthe and Barbara Trudell. *Mother Tongue Matters: Local Language As A Key To Effective Learning. Programme and Meeting Document*. Paris: UNESCO, 2008.

Dewey, John. *Democracy and Education: An Introduction to the Philosophy of Education*. New York: Macmillan, 1916.

Gorter, Durk and Jasone Cenoz. "Language Education Policy and Multilingual Assessment." Taylor and Francis Online (2016): 231-248.

Halsey, A. H., et al. *Education: Culture, Economy, Society*. Oxford: Oxford University Press, 1997.

Hornberger, Nancy H. and Sandra Lee McKay. *Sociolinguistics and Language Education*. Bristol; Buffalo; Toronto: Multilingual Matters, 2010.

Kumar, Krishna. *What is Worth Teaching?* New Delhi: Orient Blackswan, 1992.

PTI. Draft National Education Policy ready: Javadekar. 15 December 2018. 10 January 2019 <https://economictimes.indiatimes.com/industry/services/education/draft-national-education-policy-ready-javadekar/articleshow/67105118.cms>.

Spolsky, B. "What is Language Policy?" Spolsky, B. *The Cambridge Handbook of Language Policy*. Cambridge: Cambridge University Press, 2012.

TNN. https://timesofindia.indiatimes.com/city/ranchi/Dictionaries-in-9-languages-for-tribal-children/articleshow/18534895.cms. 16 February 2013. 10 January 2019 <https://timesofindia.indiatimes.com/city/ranchi/Dictionaries-in-9-languages-for-tribal-children/articleshow/18534895.cms>.

Yadav, Shyamlal. Hindi must be made mandatory till Class 8, says new policy draft. 10 January 2019. 10 January 2019 <https://indianexpress.com/article/education/hindi-must-be-made-mandatory-till-class-8-says-new-policy-draft-5531063/>.

[57]   *Lamkang Phonology* — Sumshot Khular, Graduate Student, Linguistics Department, University of North Texas.

Lamkang (ethnologue ISO 639-3 code [lmk]) is a Tibeto-Burman language spoken by the Lamkang Naga people. The Lamkang are found in Chandel, Tengnoupal and Senapati districts of Manipur spread across more than 40 villages, today there are Lamkang living in Kohima and Dimapur, Nagaland and a few Lamkang live in the Tamu area of Myanmar the estimated total population is approximately 10,000.

Lamkang is an endangered, under-resourced and under-documented language. Until recently the data about northwestern kc branch becomes available (Thounajam and Chelliah 2007)[9] that Lamkang shows some parallels with anal especially in the lexicon.

In 1888, the Manipur State Government Gazetteer used the language name to name the group, that is, it referred to the people as "Lamgang".**[10]** In the Royal Court Chronicle of the Meitei people of the Imphal valley, in a treatise called *Cheitharol Kumbaba* 'The Royal Court Chronicles', the Lamkang were referred to as *Hiroi Lamgang* 'Lamkang boat-makers' (from Meitei *hiroi* 'boatman' (a compound of *hi* 'boat' + *roi* 'rower')). According to Meitei oral tradition, the Lamkang, who inhabited a forested region in the hills, presented canoe-like boats to the nobility of Manipur, which is where the moniker *Hiroi Lamgang* originated.The Lamkang skills in fishing and canoeing were well known. In *The Naga Tribes of Manipur* (1911),[11] Hudson states that in a village not far from Shugunu (Sugnu) were boat-makers for the Meitei nobility. The villagers themselves assert that the name of their village means 'boat-maker of drylands', which finds support in the sea products the Lamkang still possess and use, e.g. marine shells, cowries and other kinds of shells used by women for adornment during traditional festivals.

This paper will attempt to highlight the Phonological systems of the Lamkang language; the tones, syllable shape, phonological rules; assimilation of consonants, vowels, and deletion.

SYLLABLE SHAPE

The simplest syllable type in Lamkang is CV: a consonant onset followed by a vowel, as exemplified in (1)

(1)   /ti/ 'below'   /do/ 'thing'

Every syllable in Lamkang requires CV (onset+nucleus). Codas are permitted, but only simple ones, as exemplified in (2)

(2) /dɐk/ 'flesh'   /mɐn/ 'price'

There are no Lamkang words with complex codas (aside from a few English loanwords like [ʧɐrs] "church", [lajn] "line" which have now come into the language). Complex onsets are very common. The first word in the Lamkang expression for 's/he thanks me' in (3) illustrates the maximum number of onset consonants:

(3) mᵊtpᵊn.pak ~ mᵊtpṇ.pak

The core of the syllable is [-pak], and everything preceding it is prefixes: the segments /m, t, p, n/ are consonants (the [n] can be syllabic). As the transcriptions show, schwas can be inserted to break up sequences of consonants, but this schwa is not part of the underlying representation. The maximally complex onset in Lamkang is schematized in (4).

(4)   CCCR̥CVC

A syllabic resonant (R̥) may occur only in the slot directly before the onset consonant (i.e. the last C before the V). The pre-onset C's may be nasals /m n/ or voiceless stops /p t k/ or the fricative /s/ (voiced stops and

---

[9] Thounaojam,Harimohon and Chelliah,Shobhana L. 2001, The Lamkang language; Grammatical sketch,Text and Lexicon,*Linguistics of the Tibeto-Burman Area 30*(1):1-212

[10] Capt. E.W. Dun, *Gazetteer of Manipur*, Vivek Publications, New Delhi, 1888, reprinted 2000.

[11] T.C. Hudson, *The Naga Tribes of Manipur*, Low Price Publications, Delhi, reprinted 1981.

aspirates as well as other consonants are barred from this position). There are no restrictions on the onset consonant: it may be any Lamkang consonant phoneme. There are however restrictions on syllable codas. The coda can be a sonorant /m n ŋ w l r j/ or a voiceless unaspirated stop /p t k ʔ/; other obstruents, including fricatives /s h/, are barred from this position.

In Lamkang sequences such as -CɐCV- are dis-preferred, and a vowel, especially a low one, is deleted when a dental consonant follows. See example (1).

(1) */-ma-dɐʔ/ → -mdɐʔ   (neg. 3rd Perfective ending)
    */-ma-nʊʔ/ → -mnʊʔ   (neg. 1sg. Perfective ending)
    */-ʧɐʔ-dɐʔ/ → -ʧdɐʔ   (3sg. Perfective middle-voice ending)
    */-ʧɐʔ-tɪʔ-nʊʔ/ → ʧtɪnʊʔ   (2sg. Perfective middle-voice ending)
    */-p(a)-dɐʔ/ → -pdɐʔ 'as s/he was …'
    */-p(a)-tɪʔ-nʊʔ/ → ptɪnʊʔ 'as you were …'
    */sʊt-nʊm/ → snʊm   as in /snʊm-m-dɐʔ/ 'A does not want to see B → A hates B' (from root /sʊt/ 'look
       at', auxiliary /nʊm/ 'want to')

References
Harimohon Thounaojam and Chelliah, Shobhana L. 2007. The Lamkang language: grammatical sketch, texts and lexicon. *Linguistics of the Tibeto-Burman Area* 30: 1-189. [Available online at http://sealang.net/archives/ltba/pdf/LTBA-30.1.1.pdf, retrieved 11 Dec. 2018.]
Capt. E.W. Dun, *Gazetteer of Manipur*, Vivek Publications, New Delhi, 1888, reprinted 2000.
T.C. Hudson, *The Naga Tribes of Manipur*, Low Price Publications, Delhi, reprinted 1988.

[58]   *Reverse sonority clusters in Pashto: complex and challenging typological implications* ─
        Muhammad Kamal Khan, Allama Iqbal Open University, Islamabad, Pakistan

Pashto, an East Iranian language with nearly 50 million native speakers in both Pakistan and Afghanistan, exhibits a wide range of complex consonant clusters. Studies (i.e., Bell & Saka, 1983; Levi, 2004; Khan, 2012 & 2014) have established that the language not only does allow complex consonant clusters but several reverse sonority clusters thus violating various phonetic principles and models (such as Sonority Sequencing Principle (SSP) and sonority scale (or hierarchy) and challenging the role of sonority fabric in the internal organization of syllable structure. Based on the rich bipartite consonant clusters of Pashto (see Table 1 for some examples from the data), the present talk would highlight the possible sequences of consonant clusters (features of Pashto phonotactics and its maximal syllabic template) and the robust violations of the overwhelming preference of languages for sonority (universal principles e.g., SSP), especially, in terms of initial (onset) glide clusters such as ([wr-] and [wl-]) with falling slope of sonority.

Having discussed the Pashto data, the talk would point out the limitations of the sonority related principles and models by showing a range of striking complexities and challenges such as:

- the inability of the phenomena of 'sonority fabric' in explaining the relationship between universal principles   and language specific constraints,
- the weakness in justifying the intrinsic content of the segments and their respective distribution,
- the need for precise phonetic measurement of sonority,
- the irrelevance of sonority distance parameters, and,
- the need for reformulating the scale and added theoretical complexities (Khan, 2016).

Finally, the talk would present the case of Pashto phonology as the acid test for the available theories on sonority and would also highlight further relevant research (e.g., related to the acquisition of reverse clusters and the repair sonority strategies) in the area.

References
Bell, A., & Saka, M. M. (1983). Reversed sonority in Pashto initial clusters. *Journal of Phonetics*. (11). 259-175.
Khan, M. K. (2012). *Pashto Phonology: The Relationship between Syllable Structure and Word Order.* Unpublished PhD dissertation, University of Azad Jammu and Kashmir, Muzaffarabad.
Khan, M. K. & Bukhari, N. H. (2014). "Reversed Sonority Clusters in Pashto: An Optimality Theoretic Justification". *Kashmir Journal of Language Research. (17: 1). 33-50.*
Khan, M. K. (2016). "SOV Word Order and Complex Syllable Structure in Pashto: A Proof of Negation". In the proceedings of 8th FLC titled as *'Multiperspective Studies of Language: Theory and Application'.* Beijing: Foreign Language Teaching and Research Press. Pages: 61-71.
Levi, S. V. (2004). *The Representation of Underlying Glides: a Cross-Linguistic Study.* Unpublished PhD dissertation, University of Washington.

Table 1: Pashto Bipartite Clusters Violating SSP at Onset Position

Type of clusters	Sequences	Examples	Gloss
	zḓ	zḓakol	Learning
Fricatives + plosives	sp	spe	Dog
	ʃk	ʃkuːŋ	Porcupine
	ʃp	ʃpa	Night
Fricatives + fricatives	zɣ	zɣaməl	Tolerate
	ʃx	ʃxəɽaː	Dispute
	sx	sxər	Father in law
Nasals + plosives	ng	ngor	Daughter in law
Nasals + plosives	nḓ	nḓror	Sister in law
Nasals + fricatives	nɣ	nɣəre	Hearth / Stove
Nasals + nasals	nm	nməsiː	Grand children
Liquids + fricatives	rɣ	rɣəɽiː	Rolling
Liquids + nasals	lm	lmər	Sun
Glides + liquids	wr	wraːrə	Nephew
	wɽ	wɽəl	Carrying
	wl	wluːna	Tresses
Affricates + plosives	tsk	tskaːk	Drink

[59]   *Uses of English loanword type in colloquial Hindi and its relationship with native lexeme jaisa* — Emma Walters, Birkbeck College, University of London, UK

Words which are borrowed from one language into another either fill a lexical gap or are added to the lexicon as synonyms of equivalent 'native' lexemes. In the latter case, the loanword will (eventually) either replace native lexemes, or exist alongside them, with one or all lexemes specializing in their meanings and contexts of use, for example English *teenager* and native *Jugendliche* in German (Onysko and Winter-Froemel, 2011). Once borrowed, words are subject to normal processes of language change, including semantic change (Koch, 2018) and grammaticalization (Heine and Kuteva, 2002). In colloquial Hindi, the well-established English loanword *type* (n.) functions in its canonical role as a categoriser, as in (1), but in some contexts appears as an alternative to Hindi-origin *jaisa* 'of such a sort as; like', an adjective (and postposition) of comparison and approximative which also displays affective properties (Montaut, 1995).

(1)

hin	tu	kitne	**type**	ki	bana	leta	hai
gls	you	how many	**types**	GEN.F	make	take.2MSG	AUX
eng	How many types of [daal] do you make?						

In this paper, I present the results of a detailed linguistic analysis (currently ongoing as part of my PhD studies) based on 16 hours of recorded naturalistic conversation between small groups of Hindi speakers in the North Indian Himalayan town of Pithoragarh (total speakers=49). Initial findings suggest that both *type* and *jaisa* have extended their meanings to function as hedging devices similar to English 'kind of', including one notable usage as a politeness strategy (Brown and Levinson, 1987) which mitigates negative descriptions of another person, as in (2) and (3).

(2)

hin	ajeeb	*type*	ki	lag	rahi
gls	strange	**type**	GEN.F	seem	PROG.F
eng	[She] looks kind of strange/weird.				

(3)

hin	vo	bewakoof	**jaisi**	aurat	hoti	hogi
gls	she	stupid	**kind of.F**	woman	be.PRES.FSG	COND.FSG
eng	She must be kind of a stupid woman.					

Findings so far are consistent with research into the grammaticalization of English 'kind of' and 'sort of' and their development as hedging devices (De Smedt, Brems and Davidse, 2007; Fetzer, 2010; Kay, 1997) as well as the 'incipient grammaticalization' of taxonomic nouns in Romance languages (Mihatsch, 156:2016), and reminiscent of the extension in function of vague nouns in Norwegian (Andersen, 2010).

Despite these similarities, there are clear differences in usage between *type* and *jaisa*. The study continues to compare the usage of both lexemes in terms of their pragmatic context, their collocations and their syntactic frames and aims to report in this paper on the functional specialization of loanword *type*.

References

Andersen, G., 2010. A Contrastive Approach to Vague Nouns, in: Kaltenböck, G., Mihatsch, W., Schneider, S. (Eds.), *New Approaches to Hedging*. BRILL, pp. 35–48.

Brown, P., Levinson, S.C., 1987. *Politeness: some universals in language usage*, Studies in interactional sociolinguistics. Cambridge University Press, Cambridge.

De Smedt, L., Brems, L., Davidse, K., 2007. NP-internal functions and extended uses of the 'type' nouns kind, sort, and type: towards a comprehensive, corpus-based description, in: Facchinetti, R. (Ed.), *Corpus Linguistics 25 Years On*. Rodopi, Amsterdam, pp. 225–255.

Fetzer, A., 2010. Hedges in context: Form and function of sort of and kind of, in: Kaltenböck, G., Mihatsch, W., Schneider, S. (Eds.), *New Approaches to Hedging*. BRILL, pp. 49–71.

Heine, B., Kuteva, T., 2002. *World Lexicon of Grammaticalization*. Cambridge University Press.

Kay, P., 1997. The kind of/sort of construction, in: *Words and the Grammar of Context, CSLI Lecture Notes*. Center for the Study of Language and Information, Stanford, Calif., pp. 145–158.

Koch, P., 2016. Meaning change and semantic shifts, in: Juvonen, P., Koptjevskaja-Tamm, M. (Eds.), *The Lexical Typology of Semantic Shifts*. Walter de Gruyter GmbH & Co KG, pp. 21–66.

Mihatsch, W., 2016. Type-noun binominals in four Romance languages. *Language Sciences* 53, pp. 136-159.

Montaut, A., 1995. Comparatif et comparaison dans les langues indiennes *sa* «quasi», de l'à-peu-près au haut degré. *Faits de langues 3*, pp. 155–164. https://doi.org/10.3406/flang.1995.989

Onysko, A., Winter-Froemel, E., 2011. Necessary loans-luxury loans? Exploring the pragmatic dimension of borrowing. *Journal of Pragmatics 43*, pp. 1550–1567.

[60]   *Parsi and Gavruni: Ritual Change and Vernacular Lexicon* ― Anton Zykov, INALCO, Paris, France

My paper will explore the issue of the ritual lexicon in contemporary Zoroastrian languages of India and Iran, Parsi (Parsi Gujarati) and Gavruni (Zoroastrian Dari), respectively. I will link the evolution of Zoroastrian ritual practices in both communities as described by Stausberg (2004) and Lüddeckens & Karanjia's (2011) to the change of lexicon that serves those rituals.

I will employ the research methodology used by Molčanova (2017) and the extensive audio- and videography-based findings I collected during three months of fieldwork in Gujarat and Maharashtra (October to December 2018) to argue that that the differences in comparative change of words linked to Zoroastrian purity and pollution rituals among the Parsis and Zoroastrians of Iran occurred at the time of weakened contracts between the two communities and are causes by the split in the rituals' conduct.

I will also study and critically review the findings of previous research on Parsi, such as the descriptive analysis of Parsi Gujarati by Gajendragadkar (1974) and Modi (2011) as well as the Gavruni material from the Dari Language Project by Farudi and Toosarvandani (2004); a collection at the Endangered Languages Archive at SOAS University of London (ELAR) by Gholami (2017) as well as my own fieldwork gatherings (2010 and 2015).

[61]   *Lexical Anaphors and Pronouns in Mising* ― Karumuri V. Subbarao, University of Hyderabad, India; Tabu Taid; Dipika Pegu, Tejpur University, India & Martin Everaert, Utrecht University, Netherland

The study of anaphora has been the focus of attention for the last three to four decades. The study of this phenomenon in different languages brings new facts concerning the nature of language. This paper shows that there are certain specific aspects of the behavior of anaphors and pronouns in Mising, a Tibeto-Burman language spoken in Assam, that are fascinating from a cross-linguistic point of view. (cf. König & Gast 2008; Lust et al 2000). We will show that Mising shows some unique combinations of 'reflexivization strategies'.
Like other languages Mising exhibits the strategy of reflexivizing the predicate by reduplication of an anaphoric element, but it simultaneously marks the predicate with a 'self' element (cf. Subbarao 2012). Mising has nominal and verbal reflexives and reciprocal markers. The verbal reflexive *-su-* occurs to the right of the verb stem. The nominal reflexive is formed by the reduplication of the anaphor *aɨə* 'self'

1.kɔ.kirɨ   də   (aɨə-aɨə-m) luyit-su-to
 children DEF self-self-ACC praise-VR-PST
  'The children praised themselves.'

The first part of the reflexive takes the case-marking of the antecedent, and the second part of the anaphor carries the case marking of the position the anaphor occupies, the structural accusative marker [-m] in (1)

above. The verbal reflexive may be optional, when the nominal reflexive occurs in a non-subcategorized position.

Mising has a reduplicated form (*akon-ə akon*) and the verbal reciprocal marker *-mɨn.su-* is formed by the addition of the group or participation *-mɨn* to the left of the verbal reflexive *-su-* to express reciprocal meaning.

2. punyam-bɨ migom-bɨ akon-*ə* akon-*əm*   luyit-su-mɨnsu-to
   Punyam-3p Migom-3   one.3-NOMone-ACC praise-VRec-VRec-PST

The first component of the reciprocal *akon* 'one' carries a case copy of the subject, the Nominative case marker *-ə* . The second part of the reciprocal *akon* 'one' carries the structural case marker of the direct object, the accusative case marker *-m*.

We will discuss several properties of anaphoric properties of Mising that are interesting from a cross-linguistic perspective:

(i)   formation of the reciprocal together with a group or participation marker functioning like an adverb (as is illustrated in (2)
(ii) cases of 'swapping' - reordering of differently case-marked elements within the complex anaphor; observe the difference between (2) and (3)

3. punyam-bɨ migom-bɨ akon-*əm* akon-*ə*   luyit-su-mɨnsu-to
   Punyam-3p Migom-3   one-ACC one.3-NOM praise-VRec-VRec-PST

(iii) the verbal reflexive functioning as an emphatic with or without the overt presence of the emphatic as an adverb

4. sə   ager-s-əm ngo (aɨə)   ger-su-yə
   this work-obj I   (myself) do-(self)-simple future
   'I'll do this work myself'

(iv) the occurrence of a verbal infix as a 'happiness or pleasure marker' in the formation of certain reciprocal verbs, to express non-volitional activities with the interpretation of 'on/of its own accord'

(v) marking of reflexivity/reciprocity several times, in a select class of inherently reflexive/reciprocal verbs:

5. ko-kɨdɨ-də **(**akon.dé akon.dém**)**   (ka)-r ɨk.su.m ɨn.su.ka
    boy-Pl-Def   one.DEF one.DEF.ACC (see)-meet.VREC-GPmarker-VREC-PST

(vi) blocking the verbal anaphor when the nominal anaphor occurs in a non-subcategorized position:

6. Bill and Jane are sitting next to each other
   bill-bɨ   la(ŋ)   jane bulu kekon kesak-pə   tet-la-duŋ/*tet-mɨn-la-duŋ
   Bill-he Conjn Jane they each   other-to   sit-Prog-exist/sit-VREC-Prog-exist
   (side by side, literally)

(vii) the optional occurrence of the verbal reflexive with psych-predicates.

We will argue that to account for the 'on/of its own accord' interpretation, the verbal reflexive *-su-* keeps the external theta role 'syntactically visible', visible enough to license an adjunct interpretation like 'on its own' (that needs an agent/external theta role). We invoke Gricean Maxims to account for the occurrence the 'happiness or pleasure marker' in the formation of certain reciprocal verbs. To account for the optional occurrence of the verbal anaphor with psych-predicates, we argue that such predicates are syntactically mono-transitive (mono-valent) and semantically transitive (bivalent).

References
König, Ekkehard & Volker Gast (eds.) 2008. *Reciprocals and reflexives: Theoretical and cross-linguistic explorations.* Berlin: de Gruyter Mouton.
Lust, Barbara, Kashi Wali, James W. Gair & Karumuri V. Subbarao (eds.). 2000. *Lexical anaphors and pronouns in selected South Asian languages: A principled typology.* Berlin: Mouton de Gruyter.
Subbarao, K.V. 2012. *South Asian Languages: A Syntactic Typology.* Cambridge: Cambridge University Press.

[62]   *Some questions about yád in Vedic* — Massimo Vai, University of Milan, Italy

According to Kiparsky (1995 *passim*), "On the evidence of Vedic, Greek, and Hittite, the Indo-European proto-language had two left-peripheral operator positions corresponding to those in Hale (1987) […] However, it lacked the category of complementizer and had no syntantically embedded sentences. Finite subordinate clauses, including relative clauses and sentential complements, were syntactically adjoined to the main clause, exhibiting "main-clause properties", such as topicalization of constituents to clause-initial position".

This approach can be considered overcome by Rizzi's *Left Periphery Theory*, according to which topic and focus (and related projections) are no longer considered specific of only main clauses, but also of subordinate clauses. The observations of Hale 1987a-b thus can be seen as special cases of a general tendency to the articulation of the left periphery of the sentence. Vedic clauses introduced by *yád* (morphologically identical to relative pronoun neuter) correspond semantically to propositions of several functions: *yád* seems to behave like an introducer of particular types of sentences which Hettrich (1988, 395) on the basis of Delbrück (1900, 324) classifies as *Explikativsätze* of temporal, conditional, causal, final, concessive, explanatory value. These *yád*-clauses are propositions that can have different values, e.g. of an object:

RV 1.93.4
ágnīṣomā céti tád vīryàṃ vāṃ / *yád* ámuṣṇītam avasám paṇíṃ gā́ḥ
"Agni and Soma, this heroic deed of you two has become conspicuous, that you two stole the food from the niggard, the cows".

The explanatory proposition can also appear without a nominal head in the main clause: in this case, only a demonstrative pronoun occurs in the main clause, which indicates the syntactic function of the explanatory proposition:

RV 5.31.7
tád ín nú te káraṇaṃ dasma vipra / áhiṃ *yád* gʰnánn ójo átr_ámimītʰāḥ
"Just this now is your deed, wondrous poet: that smashing the serpent, you measured your strength there".

Speyer (1896: 87) observes that the demonstrative in the main clause is often lacking with verbs of knowing, thinking, believing, etc., with which *yád* introduces an object clause, e.g.:

Ch. Up. 4.10.5

vijānāmy ahaṃ *yat* prāṇo brahma kaṃ ca tu kʰaṃ ca na vijānāmi iti

"I understand that Brahman is life. But I do not understand [that Brahman is] *ka* and *kha*".

On the other hand, the situation that, according to Kiparsky, should apply to the reconstruction of Indo-European, has been extended also to the Vedic language by some scholars: for instance, Davison 2009a-b argues that the use of the relative form *joo* as a complementizer is an innovation of the Neo-Indo-Aryan. However, as we have already seen in the above mentioned cases of *yád*, this does not seem such a late innovation. It is perhaps possible that the occurrence of the correlate demonstrative pronoun makes Rigvedic completive sentences look less prototypical than other subordinate clauses. However, in this case, the problem should also arise for some modern Indo-European languages which use cataphoric pronouns co-indexed with the subordinate clauses, e.g.:

weil Peter **es** bedauert, **dass** er krank ist

Various analyses have been proposed for this kind of sentences, among which this one from Müller (1995: 231) (adapted by Sudhoff 2016: 28):

With this analysis, the sentence introduced by *dass* is once again a possible argument of the superordinate sentence: it would *no longer be an adjunct, but a complement of a nominal head* – the argument of the proposition - that houses the element *es*. The same analysis could also be applied to the sentences introduced by *yád* in Vedic (and *ŏ* in Homeric Greek): these sentences are complements of the arguments marked by *tád* (*tó*) which are contained in the superordinate clause, e.g.:

RV 1.93.4

References

DAVISON 2009a = A. Davison, *Adjunction, features and locality in Sanskrit and Hindi/Urdu correlatives*, in: Lipták, Aniko (ed.) Correlatives Cross-Linguistically, John Benjamins Publishing Company, Amsterdam / Philadelphia, 223-262, 2009.

DAVISON 2009b = A. Davison, *Correlative clause features in Sanskrit and Hindi/Urdu*, in: Crisma, P. / Longobardi, G. (eds.) *Historical Syntax and Linguistic Theory*, OUP, Oxford/New York, 271-291, 2009.

DELBRÜCK 1900 = B. Delbrück, *Vergleichende Syntax der indogermanischen Sprachen*, III, Strassburg 1900.

HALE 1987a = M. Hale, *Studies in the Comparative Syntax of the Oldest Indo-Iranian Languages*, Diss. Harvard, 1987.

HALE 1987b = M. Hale, *Notes on Wackernagel's Law in the language of the Rigveda*, in C. Watkins (ed.), *Studies in Memory of Warren Cowgill (1929-1985)*. Papers from the Fourth East Coast Indo-European Conference, Cornell University, June 6-9, 1985, Berlin-New York, de Gruyter, 1987, 38-50.

HETTRICH 1988 = H. Hettrich, *Untersuchungen zur Hypotaxe in Vedischen*, Walter de Gruyter, Berlin – New York 1988.

KIPARSKY 1995 = P. Kiparsky, *Indo-european Origins of Germanic Syntax*, in Battye, A. – Roberts, I. (eds.) *Clause Structure and Linguistic Change*, Oxford University Press, Oxford – New York, 1995, 140-169.

MÜLLER 1995 = G. Müller, *On extraposition & successive cyclicity*. In: *On Extraction and Extraposition in German* [Linguistik Aktuell/Linguistics Today 11], Uli Lutz & Jürgen Pafel (eds),213–243. Amsterdam: John Benjamins. doi: 10.1075/la.11.

RIZZI 1997 = L. Rizzi, *The fine structure of the left periphery*, in Haegeman (ed.) *Elements of Grammar*, Dordrecht, Kluwer, 1997, 281-337.

SPEYER, J.S. 1896 *Vedische und Sanskrit Syntax*, Verlag von Karl J. Trübner, Strassburg.

SUDHOFF, S. 2016, *Correlates of object clauses in German and Dutch*, in: Frey, W. /Meinunger, A./Schwabe, K. (eds.) *Inner-sentential Propositional Proforms. Syntactic properties and interpretative effects*, John Benjamins Publishing Company, Amsterdam / Philadelphia, 23-48.

[63] *Rhetorical Questions in Gujarati: The missing case of "umm, yeah!"* ― Vyom Sharma, IIT, Delhi, India; Kinjal Joshi, University of Oslo, Norway; Devashree Trivedi, The Maharaja Sayajirao University of Baroda, Gujrat, India

This paper presents an analysis of the distribution of polar operator[12] *su* in Gujarati. The polar *su* when placed in the sentence-initial gives a yes-no question (polar question) reading:

1. **su**   ram-e   kidhu?   [yes-no question]
   what   Ram-Erg.M   say
   'What Ram said?'   (*Literal meaning*)
   'Did Ram say (something)?'   *(Intended meaning)*

In the pre-verbal position, polar *su* gives an information seeking question and it is no longer a polar question.

2. ram-e   **su**   kidhu?   [ordinary question]
   Ram-Erg.M   what   say
   'What Ram said?'   (*Literal meaning*)
   'Did Ram say (something)?' *(Intended meaning)*

But when the polar *su* is in the sentence-final position, it is a rhetorical question:

4. ram-e   chappu-thi   kaapyu   **su**? [Rhetoric question]
   Ram-Erg.M   knife-INST.   cut.SGN.   what
   'What did Ram cut with the knife (after all)?'

Caponigro and Sprouse (2007) propose some diagnostics to find whether an interrogative is a RHETORICAL QUESTION (RQ) or an ORDINARY QUESTION (OQ). We apply these diagnostics on interrogatives with sentence-final *su* in Gujarati and see if these are truly RQs or not.

Caponigro and Sprouse (2007) also give a pragmatic analysis of different types of interrogatives based on context update semantics (Heim, 1982) and the concept of 'Common Ground' (CG)[13] (Stalnaker, 1978):

If A is the speaker and B is the addressee, and Q is the question asked by A: there could be 4 situations:
Situation 1: A has belief about answer of Q, B does not, so it is a "Quiz Question"
Situation 2: A has belief about answer of Q and so does B, it is in CG, and both A and B can answer Q. This is a "Rhetoric Question"
Situation 3: A has no belief about answer of Q and B does, it is not in CG, only B can answer Q. This is an "Ordinary Question"

---

[12] See Dayal (2018).
[13] "CG is as a set of propositions representing what the participants in a discourse take to be mutually believed, or at least mutually assumed for the purposes of the discourse… CG allows us to handle Speaker's and Address's mutual knowledge", Caponigro and Sprouse (2007)

Situation 4: A has no belief about answer of Q and neither does B, it is not in CG, no one can answer Q. This is an "Existentialist Question"

Through our analysis of distribution of polar *su* in Gujarati, we have found out that in the pragmatic framework provided by Caponigro and Sprouse (2007), there is one missing case of answerable RQs:

Situation 5: where A has belief about answer of Q and so does B, but these beliefs are in contradiction of each other and both A and B can answer Q. For example, look at the following context:
Context: A teenager has got an eye-brow piercing, and the mom is furious. She asks the teenager:
Mom: Do you have any idea how crazy you look?
(It looks bad!)
Teenager: umm, Yeah! (it looks cool, that's why I did it)

The interrogative in this scenario is also an RQ, but it is answerable. And hence, we require a further classification of RQs, as ANSWERABLE and NON-ANSWERABLE RQs.

References

Caponigro, I. & Sprouse, J. 2007. 'Rhetorical Questions as Questions'. *Proceedings of Sinn und Bedeutung 11*. Universitat Pompeu Fabra.
Dayal, V. 2018. 'Polar kyaa in Hindi'. *GIAN Lecture Notes*. Mumbai: University of Mumbai.
Heim, Irene 1982. The Semantics of Definite and Indefinite Noun Phrases. Ph.D. dissertation, University of Massachusetts, Amherst.
Stalnaker, R. 1978, Assertion, In P. Cole (ed.), *Pragmatics: Syntax and Semantics, Volume 9*. New York: Academic Press.

[64]   *A typological sketch of Northern Gondi: a first overview* ─ Jessica Katiuscia Ivani

Gondi is a Dravidian language spoken by approximately 2 million people in scattered areas of North-Central India. Gondi language and related varieties constitute a branch of the southern Dravidian subfamily, along with Telugu (Teluguic) and Konda-Kui languages. Gondi status is considered endangered. Although some works on Gondi have appeared in the Dravidian literature mainly during the last century (e.g, Andres 1978, Rama Rao 1954, Chenevix Trench 1919, Subrahmanyam 1968 among others), Gondi remains heavily under described, and a typological overview of the language is still lacking, as for any Dravidian variety.

This data fragmentation and scarcity is also represented on typological atlases, such as the World Atlas of Language Structures (Dryer 2013) where only a fraction of the features (30 out of more than 130) have been covered for Gondi, mostly restricted to word order only.
The present study aims to fill some gaps in description, by offering a typological overview on the noun domain, with a preliminary focus to nominal categories as gender, number and case, and also including more specific topics like numerals and deixis.

The main sources used in this research are first hand data (based on elicited questionnaires, narratives and free conversational material) collected during two distinct fieldwork trips, both carried out in the village of Kelapur / Pandharkawda in Yavatmal district, Maharashtra, in November 2018 and March 2019, respectively. The dialectal variety of Yavatmal here presented has been linked to Northern Gondi and it is, until now, still undescribed.

Beside language preservation and descriptive purposes, such an up-to-date profile can also contribute to the open discussion of language contact in South Asia, being Gondi spoken outside the 'Dravidian block' of Southern India and historically under strong Indo-Aryan pressure (e.g., Marathi).

References
Andres, Susie. 1978. A Description of Muria Gondi Phonology and Morphology. (Doctoral dissertation, Poona: Deccan College; 696 pp.)
Chenevix Trench, Charles Godfrey. 1919. Grammar of Gondi: As Spoken in the Betul District, Central Provinces, India. Madras: Government Press. 104pp.
Dryer, Matthew S. & Haspelmath, Martin (eds.) 2013. The World Atlas of Language Structures Online. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at http://wals.info
Rama Rao, K.. 1979. Phonology and Morphology of Koya Language. (Doctoral dissertation, Osmania University).
Subrahmanyam, P. S. 1968. A descriptive grammar of Gondi. (Publication / Dept. of Linguistics, 16.) Annamalainagar, India: Annamalainagar: Annamalai Univ. vii+234pp.

[65]   *Why can't [nɔkʃal] vary: A case of metathesis blocking in Bangla* — Paroma Sanyal, Indian Institute of Technology, New Delhi, India

The prototypical example demonstrating metathesis is the sequence of a velar stop and a coronal fricative.

1. South Asian/ Colloquial English	ask~aks	'ask'
	desk~deks	'desk'
	buks~*busk	'books'
2. West Saxon dialect of old English (Jordan, 1974)	frosk~froks	'frog'
	fiskas~fiksas	'fishes'
3. Colloquial French (Grammont, 1923)	fiks~fisk	'fixed'
	aks~ask	'axis'
4. Colloquial Bangla	rikʃa~riʃka	'rickshaw'
	bakʃo~baʃko	'box'
	kʰuʃki~*kʰukʃi	'dandruff'

Note that in the English examples in (1) the sequence of sibilant-plosive develops an alternative pronunciation while the plosive-sibilant sequence doesn't. The pattern in (4) is exactly the opposite, where the underlying plosive-sibilant sequence varies, but sibilant-plosive sequence remains invariant. This asymmetry is due to the syllabic position of the segments in question.

Word-final tautosyllabic [-sk] sequences are phonetically marked owing to the difficulty in perceiving an unreleased plosive. This perceptual markedness is compounded by the high salience of the preceding sibilant. Metathesis makes the sequence better since sibilants are easy to perceive. Further, by PoA hierarchy (de lacy, 2006), the velar plosive is more marked than other plosives as well increasing the overall markedness of the [-sk] sequence. Thus in the universal phonological grammar comprising of regular rules that generate a terminal string of sounds, a penultimate rule that generates a sibilant as the terminal is better than a penultimate rule that generates a velar plosive as a terminal.

According to the syllable contact theory (Hooper, 1972), in an ideal situation the last segment of the preceding syllable is more sonorous than the first segment of the following syllable. This is the case of the context of hetero-syllabic [-ʃk-] sequences. Here, the sibilant is the coda of the syllable that precedes the one

where the velar plosive is the onset. However, the plosive-sibilant sequence [-kʃ-] is exactly opposite of the ideal sonority dispersion. Consequently, in the heterosyllabic underlying contexts the [-ʃk-] sequences are invariant, while the [-kʃ-] sequences have alternative variants through metathesis.

Since coda clusters are not present in Bangla, all cases of metathesis in Bangla belong to the hetero-syllabic plosive-sibilant sequences.

Metathesis in [-k.ʃ-] sequences		No metathesis in [-ʃ.k-] sequences	
dek.tʃi~detʃ.ki	'cauldron'	hẽtʃ.ki, * hẽk.tʃi	'hiccup'
rik.ʃa~riʃ.ka	'rickshaw'	putʃ.ki, *puk.tʃi	'tiny'
bak.ʃo~baʃ.ko	'box'	pʰutʃ.ka, * pʰuk.tʃa	'kind of food'

As per the analysis so far, we predict that all heterosyllabic [-kʃ-] sequences in Bangla will exhibit metathesis systematically. In fact they do, except when the syllable with /k/ as the coda has the coronal nasal /n/ in the onset.

Blocking of metathesis in [-k.ʃ-] sequences	
nɔk.ʃal~*nɔʃ.kal	'naxal/person belonging to Indian radical left'
nɔk.ʃa~*nɔʃ.ka	'design'

The blocking of metathesis in this context of the coronal nasal and low vowel produces a ganging-up effect where the potentially alternative pronunciation is slightly less harmonic than the one with the [-k.ʃ-] sequence.

rikʃa	[*AGREE PLACE] σ w=2	[AGREE F₂] σ w=1	σ CONTACT THEORY w=1	LINEARITY-IO w=1	HARMONIC VALUE
☞rik.ʃa		-2	-1		-3
☞riʃ.ka	-1			-1	-3

nɔkʃa	[*AGREE PLACE] σ w=2	[AGREE F₂] σ w=1	σ CONTACT THEORY w=1	LINEARITY-IO w=1	HARMONIC VALUE
☞nɔk.ʃa		-1	-1		-2
nɔʃ.ka	-1			-1	-3

List of constraints	
[*AGREE PLACE] σ	This constraint incurs a violation if the consonants within the same syllable share the same place of articulation. For e.g. [n_ʃ] and [r_ʃ] are both coronal and incur a violation.
[AGREE F₂] σ	This constraint incurs a violation is the value of the second formant (F2) of the vowel in the nucleus is very dissimilar to the F2 value of the consonant within the same syllable. Velar /k/ incurs violation in the context of front vowel (high F2) and palatal /ʃ/ incurs violation with back vowels.
σ CONTACT THEORY	Syllable contact theory. This constraint incurs a violation if the last segment of the preceding syllable is less sonorous than the first segment of the following syllable.

LINEARITY-IO	The precedence relation between units of the corresponding input and output strings should match. Metathesis incurs violation of this constraint.

References

de Lacy, Paul. 2006.”What is markedness?” In *Markedness: Reduction and Preservation in Phonology*, by Paul de Lacy, 2. Cambridge: Cambridge University Press.

Pater, Joe. 2009. Weighed constraints in generative linguistics. *Cognitive Science* 33:999-1035

Hooper, Joan. B. 1972. The Syllable in Phonological Theory. *Language* 48 (3): 525-540.

[66]   *Things lost and things kept - language change in Koĭc (English: Sunuwar; Tibeto-Burman; Nepal)[14]* — Dörte Borchers, Institut für Sprachwissenschaft, Universität Graz, Austria

Koĭc ([kɔĭts]; English: Sunwar; Nepali: सुनुवार Sunuvār) is a Kiranti language spoken in eastern Nepal. With about 38 000 speakers, Koĭc is one the bigger languages of the 123 languages of Nepal.[15]

Koĭc once had a biactantial agreement system with transitive verbs agreeing with agents and patients (Carol Genetti 1988), a feature typical of Kiranti languages (Michailovsky 2017: 3). In modern Koĭc, transitive verbs agree with the agent but not with the patient. The loss of indexing patients on verbs makes Koĭc similar to Nepal's official language Nepali (Indo-Iranian, Nepal), with which most speakers of Koĭc are bilingual.

The formerly employed biactantial agreement markers did not disappear without a trace. The modern Koĭc verbal paradigms and the obsolete verbal paradigms with biactantial agreement collected by Genetti (1988) show rather regular similarities in form and function. In addition, reference to a first person singular agent as opposed to reference to other speech act participant shows the retention of structural differences. In the equivalent Nepali paradigms, there is no such difference between indexing first person agents and other agents.

A brief overview of changes in the Koĭc language from a biactantial to a monoactantial agreement marking system will be followed by a presentation of the morphological and semantic continuities between the older and newer person marking system of Koĭc. Finally, possible reasons for the special status of the marking of a first-person singular agent in the older and in the modern spoken language will be discussed.

References

Borchers, Dörte 2008. *A Grammar of Sunwar. Descriptive grammar, paradigms, texts and glossary* (Languages of the Greater Himalayan Region, Volume 7). Leiden: Brill

Central Bureau of Statistics 2012. *National Population and Housing Census 2011* (National Report). Volume 01, NPHC 2011. Kathmandu: Government of Nepal, National Planning Commission Secretariat (https://unstats.un.org/unsd/demographic/sources/census/wphc/Nepal/Nepal-Census-2011-Vol1.pdf; accessed 21 March 2017)

Commissioner for Linguistic Minorities 2011. *48th Report of the Commissioner for Linguistic Minorities in India (July 2010 to June 2011).* Allahabad: Ministry of Minority Affairs, Government of India (http://nclm.nic.in/shared/linkimages/nclm48threport.pdf; accessed 14. April 2017)

Genetti, Carol 1988. Notes on the structure of the Sunwari transitive verb, in: *Linguistics of the Tibeto-Burman Area* 11.2; 62-92

---

[14] The non-historical data of Koĭc forming the basis of this study have been collected by the author during about ten fieldwork campaigns with native speakers in rural and urban Nepal.

[1] The figures for languages of Nepal and speakers of Koĭc are those of the Census of 2011 (Central Bureau of Statistics 2012).

Michailovsky, Boyd 2017. Kiranti Languages. The Sino-Tibetan Languages <halshs-01705023> (https://halshs.archives-ouvertes.fr/halshs-01705023/document; accessed 15 January 2019) [printed in: LaPolla, Randy J. and Graham Thurgood (eds.) 2016. *The Sino-Tibetan languages* (Routledge Language Family Series), 2nd Ed. Routledge: Oxford & New York. 646-679]

[67]   *Pro-forms and perspectival phrases: Evidence from anaphorization for a fine-grained patterning*
— Rahul Balusu, EFLU, Hyderabad, India

Key Contributions: Perspectival or Logophoric phrases (LOGP) active in syntactic derivations have succeeded in accounting for the characteristic distribution and properties of anaphors that are perspectival or exempt [S12, C17] —binding by the special pro-form (pro$_{log}$) in the Spec of LOGP, located inside the spell-out domain of the phase makes exempt anaphora 'unexempt' and at the same time explains their dual nature as pronouns from outside the phase and as anaphors from inside the phase. We propose another location where LOGPs are instantiated, at the phase edge (of CP, vP, DP and PP), that binds pronouns and logophors. We find that this explains the distribution and properties of various pro-forms (that arise as a result of binding by LOGP), in general and Dravidian in particular, in this case study. It also gives us a classification of pro-forms based on their sensitivity to LOGP: anaphor ([+LOG]/[-LOG]), pronoun ([+LOG]/[-LOG]) & logophor.

Zooming in on Dravidian: The Dravidian pro-forms are, we propose, a mix of pronouns (some [+LOG] and some [-LOG]) and logophors, and their characteristics help locate the two kinds of LOGPs (outside or inside spellout domain) in various phases. Telugu pronouns, while free to refer outside the clause in other contexts, must co-refer within the clause in certain configurations, i.e. they are anaphorized. We propose that this anaphorization is due to the LOGP occurring outside the spellout domain of the phase (the pronoun cannot be bound by the LOGP within the spellout domain, a Condition B violation). We use these anaphorization configurations to diagnose a LOGP outside the spellout domain of phases. There are four such configurations — in each of the CP, vP, DP and PP phases. We lay out the properties of each configuration below. On the other hand we analyze Tamil *taan* as a [3p] logophor, marked [+LOG]. It always requires binding by the pro$_{log}$ in LOGP, whether inside our outside the spellout domain. The configurations where Telugu pronouns are not anaphorized, but where Tamil (or Kannada or Malayalam) *taan* is licensed, are those where LOGP occurs inside the spellout domain. These are again seen in each phase (CP, vP, DP, PP), as we show below.

§1 LOGP in CP: In the CP phase, a pronoun is anaphorized in the Agreement Shift (AgrShft) configuration (1), and not otherwise (2). How does AgrShft happen (and does it involve any Indexical Shift)?

(1) vaāDu vaāDu paDDaā-nu annaā-Du
   he   he   fell-1MSG   said-3MSG
   'He$_i$ said he$_{i/*j}$ fell'

(2) vaāDu vaāDu paDDaā-Du annaā-Du
   he   he   fell-3MSG   said-3MSG
   'He$_i$ said he$_{i/j}$ fell'

We propose that the Op(erator) head of LOGP has a [1p] feature that it transfers to T via C-to-T transfer – the blocking effects of Malayalam *taan* are telling here, because what counts is not c-command (in either direction) between blocker and logophor but intervening TP with non-matching features [J98]. Logophoric Complementizer agreement [B08] also points in that direction. When C-to-T transfer happens, the agent θ-role gets transferred from T to Op$_{log}$, which then assigns it to pro$_{log}$. So only agent pronouns can co-refer with pro$_{log}$, non-agents cannot. The C-to-T transfer of [1p] shows up as AgrShft. This [1p] is not on any indexical, thus not interpreted as author. Any [1p] indexical in the clause is interpreted unshifted (unlike Indexical Shift). When there is no LOGP in the phase edge, there is no AgrShft, and a normal pronominal interpretation ensues. This LOGP in the phase edge explains why AgrShft exhibits the implicational

103

hierarchy of selectional variation [S12], speech « thought « knowledge depending on where in the left periphery of a given language LOGP is merged —the lower it is merged the more predicates that can embed it. AgrShft is seen with predicates higher up in the hierarchy in Telugu than in Tamil. The Tamil pronoun *nii* 'you' also exhibits AgrShft, but not the Tamil pronoun *awan* 'he' [S17]. We take *nii* to have a [+LOG], and *awan* a [-LOG] feature. LOGP inside spellout domain: *taan* when bound by the LOGP in the phase edge also shows AgrShft [S12, 17]. But when bound by the LOGP merged within the spellout domain of CP (being a logophor it does not have a Condition A/B restriction), [1p]-Op$_{log}$ cannot do C-to-T transfer of [1p]. Thus agreement is with the [3p] on *taan* itself, no AgrShft. Nor does pro$_{log}$ get the agent θ-role. So this position also licenses all non-agentive *taan* in the spellout domain, and not being in phase edge doesn't show selectional variation.

§2 LOGP in vP: In the vP phase, pronouns are anaphorized when there is the reflexive marker *kun* (filtering out the self-benefactive reading *kun* can impart). Where they must not be bound (3), now they must be obligatorily bound, (4). By our reasoning, this again diagnoses a LOGP outside the spellout domain. Without *kun* (*koL* in Tamil), *taan* is bad, as it requires a LOGP to license it [S16], (5). With *koL*, logophor *taan* is fine.

(3) vaāDu vaāDini koTTeāDu
    he   him   hit-3MSG
    'He$_i$ hit him$_{*i/j}$'

(4) vaāDu vaāDini koTTu-kun-aa-Du
    he   him   hit-RFLX-PST-3MSG
    'He$_i$ hit him$_{i/*j}$ (himself)'

(5) *awan tann-æ aDitt-aān
    He   log-ACC hit-3MSG
    Intended:'He$_i$ hit him$_{i/j}$'

Are there configurations in vP where pronouns are not anaphorized but *taan* is licensed? Yes, predication with psych-verbs, (6)-(8). These then are configurations where LOGP is within the spellout domain. Psych-predicates come with perspective, they encode a LOGP in their structure (like attitude verbs [S16]), and this is inside the spellout domain of the phase. Thus it licenses the logophor *taan* but not the pronoun *vaaDu*.

(6) vaāDu vaāDini preāmnceāDu
    he   him   loved-3MSG
    'He$_i$ loved him$_{*i/j}$'

(7) vaāDu vaāDini preāmnc-kun-aāDu
    he   him   loved-RFLX-3MSG
    'He$_i$ loved him$_{i/*j}$ (himself)'

(8) awan tanne virumbugir-aān
    he   log loves-3MSG
    'He loves himself'

§3 LOGP in PP: In this phase, pronouns are anaphorized when they are composite (10), but not otherwise (9). So these composite PPs have a LOGP outside the spellout domain. We won't analyze their structure here.

(9) vaāDi-ki vaāDi-māıda namakam
    he-DAT he-on-top   trust
    'He$_i$ trusts him$_{i/j}$'

(10) vaāDi-ki vaāDi-māıda-vaāDi-ki namakam
     he-DAT he-on-top-he-DAT   trust
     'He$_i$ trusts him$_{i/*j}$'

In this phase too there are configurations where *taan* is licensed (11), but pronouns are not anaphorized, (12), diagnosing a LOGP within the spellout domain of the phase, what [S17] calls a 'khorastic' LOGP.

(11) awan tan-akku-meālæ oru plane-æ   paārtt-aān
     He   log-DAT-on-top a   plane-acc saw-3MSG
     'He$_i$ saw a plane above him$_{*i/j}$ (himself)'

(12) vaāDu vaāDi-māıda oka plane cuāseā-Du
     he   he-on-top   one plane saw-3MSG
     'He$_i$ saw a plane above him$_{i/j}$'

§4 LOGP in DP: In this phase, Telugu pronouns are never anaphorized (13), they need the help of *kun* (14), in the vP phase, but Kannada pronouns are, (15)-(16). Thus Kannada instantiates a LOGP outside the spellout domain of DP, but Telugu does not. Tamil and Malayalam also instantiate it (not illustrated here).

(13) vaāDu vaāDi-ni-vaāDu koTTeāDu

    He   he-ACC-he   hit

    'He$_i$ hit him$_{*i/j}$'

(14) vaāDu vaāDi-ni-vaāDu koTTu-kun-aāDu

    he   he-ACC-he   hit-RFLX-3MSG

    'He$_i$ hit him$_{i/*j}$'

(15) avanu avan-annu-avanu hoDeda

    he   he-ACC-he   hit

    'He$_i$ hit him$_{i/*j}$'

(16) avanu avan-annu hoDeda

    he   he-ACC   hit

    'He$_i$ hit him$_{*i/j}$'

Not surprisingly now, this phase also hosts LOGP within the spellout domain, that licenses *taan* but does not anaphorize pronouns, (17). The pronouns again need the help of *kun* in the vP phase to anaphorize, (18).

(17) awan tann-oāDæ pustagatt-æ paDittaān

    he   he-GEN   book-ACC   read

    'He$_i$ read his$_{i/*j}$ book'

(18) vaāDu vaāD-I pustakam cadiveāDu / caduvu-kun-aāDu

    he   he-GEN   book   read-3MSG / read-RFLX-3MSG

    'He$_i$ read his$_{i/j}$ book'   &   'He$_i$ read his$_{i/*j}$ book'

Multiple LOGPs & Multiple phases: The LOGP outside the spellout domain in CP can bind the subject *taan* and also the object *taan* (if there are no other LOGPs in phases below it), showing up as AgrShft. So in Tamil a subject and object *taan* under an attitude predicate will co-refer (barring another LOGP in a DP/PP argument), without the need for *koL* on the verb, (19). In Telugu, the only way a subject and object pronoun co-refer is via anaphorization by *kun* in the vP (where pronoun reference is fixed). When AgrShft anaphorization is added on top at the CP phase, all the pronouns now co-refer with the attitude holder, (20).

(19) awan taān tann-æ aDicc-eān-nnu sonn-aān

    he   log   log-ACC hit-1SG-COMP   said-3MSG

    'He$_i$ said that he$_{i/*j}$ hit him$_{i/*j}$'

(20) vaāDu vaāDu vaāDini koTTu-kun-aānu annaā-Du

    he   he   him   hit-RFLX-1SG   said-3MSG

    'He$_i$ said that he$_{i/*j}$ hit him$_{i/*j}$'

Zooming back out again: We suggest that this classification also extends to null pro-forms, and that the partial pro-drop of some languages (Marathi, Assamese) which shows sensitivity to whether the pro-form is the perspectival antecedent or not, are marked [+LOG]. The next step is to figure out how the internal structure of pro-forms in the Dravidian and other languages gives them these features and their logophoric senitivity. The composite PP/DP forms of Dravidian especially are windows into how anaphors and logophors are built.

References

[B08]Baker: The syntax of agreement and concord [C17] Charnavel: Apparent Exemption from Condition A: a Perspective Based Theory [J98] Jayaseelan: Blocking Effects and the Syntax of Malayalam *taan* [S12] Sundaresan: Context and (co)reference in the syntax and its interfaces [S16]Perspectival reflexivity [S17]Perspective is syntactic: evidence from anaphora

[68]   *Relative Clauses in Indo-Aryan Perspectives on Diachronic Pragmatics* — Rainer Kimmig, Eberhard Karls Universität Tübingen, Germany

Among the Indo-European languages families possessing a distinct relative pronoun evolved from IE *(H)yo- (→ Skt. yá-, Hindi-Urdu jo, Bengali ye etc.), Indo-Aryan is the only family that has preserved both the pronoun and its basic syntax in the majority of its languages till the present, i.e., throughout its attested history of three and a half millennia.

The status of Indo-Aryan relative clauses has been controversial. There have been several attempts to treat the two clauses of a relative-correlative structure as two independent clauses (PORZIG 1932; see also the discussion in KACHRU 1980). This is the approach of the Indian tradition as well, which, like European grammar till the 1820s, had no concept of subordinate finite clauses ('Nebensätze', see WEBER 2010).
This section will discuss the basic types of Indo-Aryan relative-correlative structures in a diachronic perspective:

(1) Relative-correlative sequences: the relative pronoun is resumed in the 'main clause' by a correlative pronoun. In post-Vedic Indo-Aryan, the unmarked position of the relative pronoun respectively the relativised noun is arguably in situ, i.e. there is no wh-movement. For Vedic, a wh-movement of sorts has been claimed (HALE 2018); the actual diversity of possible positions, however, suggests a more refined treatment that takes into account both pragmatics and literary genre.
(2) Inverted relative-correlative sequences: the relative clause follows the main clause, which contains a correlative pronoun pointing ahead to the relative pronoun.
(3) Appositive sequences: the relative clause follows the main clause; it is semantically attached to a noun which is not marked by a correlative pronoun.

It will be worked out that both in (1) and (2) the main function of the relative clause is defining the 'theme' or 'topic' of the whole structure. In (2), the 'rheme' or 'comment', i.e. the main clause, is emphatically marked and therefore fronted. In (3), the appositive relative clause provides an additional specification of a key noun of the main clause.

Besides these basic forms, some Indo-Aryan languages have developed some new special types.

(4) Relative clauses without relative pronoun: varieties without relative pronoun in relative clauses of type (1) are common in Gujarati and Marathi, but also attested in early Hindi-Urdu (e.g. Mir Taqi Mir, 18th century).
(5) Postnominal 'attributive' relative clauses: these evolved in Indo-Aryan languages first under the influence of Persian (as in early Urdu) and, since the 19th century, of English. They are still not completely integrated in the overall syntactical structure of Indo-Aryan as the phenomenon of 'stranded' postpositions clearly shows (noun – intervening relative clause – postposition).

Indo-Aryan languages that have come under strong influence of non-Indo-Aryan languages reduced or abandoned the use of the Indo-Aryan types of relative clauses: varieties of Hindi-Urdu, Gujarati and Konkani under the influence of Dravidian, Nepali under the influence of Tibeto-Burman, Romani under the influence of Iranian, Greek etc.

Classical Indian Sentence Analysis. As is well known, the Grammatical tradition in India, both Pāṇinian and other, provides detailed rules on the morphosyntax of nouns and verbs, but has not very much to say on the syntax and the pragmatics of clauses and sentences. The only set of rules concerning relative clauses deal with verbal accent: a finite verb in syntactic connection with a form of the relative pronoun yád is accented, i.e. it has an udātta ('high pitched accent') .

For anything more, one has to look into traditions normally not taken into consideration by linguists. Two schools of theoretical thinking are of particular importance in this context:

(1) the Mīmāṃsā (ritual and legal 'hermeneutics', including aspects of 'textual linguistics'); and
(2) the Alaṅkāraśāstra ('poetics' or 'aesthetics').

106

The paper will draw attention on some of the basic tenets common to both of these schools about sentence analysis in general and on relative-correlative clauses in particular. (A first, if flawed, attempt at a discussion of this material is provided by RENOU 1961.)

The following tenets of the Mīmāṃsā will be discussed:
— relative clause and correlative clause are independent 'sentences' (vākya), but the pronouns yad and tad are 'inseparably interconnected': yad-tador nityābhisaṃbandhaḥ (MAHIMABHAṬṬA) – this rule is too general.
— na hi yacchabda-tacchabdau vartete bhinna- vastuni.
'For the words yad and tad do not refer to different objects', i.e., yad and tad are coreferential (KUMĀRILA, Ślokavārttika; 7th century)
— the 'analysis of sentences' or sequences of sentences (vacanavyakti) into anuvādya and vidheya (or uddeśya and upādeya), traditionally translated by 'subject' and 'object', but in function clearly rather 'theme and rheme' or 'topic and comment';
— the identification of the yad-clause (relative clause) with the anuvādya (or uddeśya) and of the tad-clause (correlative clause) with the vidheya or upādeya:
yadvṛttayogaḥ prāthamyam ity ādy uddeśa-lakṣaṇam।
tadvṛttam evakāraś ca syād upādeyalakṣaṇam॥
'Syntactical connection (sc. of a noun) with a form of yad and precedence are marks of the uddeśya ('theme'), syntactical connection (sc. of a noun) with a form of tad or with the particle eva are marks of the upādeya ('rheme')'. (KUMĀRILA, Ślokavārttika) – again an important, but too general statement.

The aesthetic philosopher Mahimabhaṭṭa (11th century) contributed to this discussion by his introduction of a particular 'poetic' defect into aesthetic theory, i.e. vidheyāvimarśa 'insufficient highlighting of the rheme' (avimṛṣṭavidheyāṃśa with Mammaṭa and later authors). Many of his examples deal with relative-correlative clauses that in his, at times excentric, opinion are ill-formed and give as some idea what in the 11th century in Kashmir could have been regarded as bad Sanskrit.

The analysis of the Mīmāṃsā (and the Alaṃkāraśāstra) combines Indo-Aryan native speaker intuition with a theoretical linguistic approach uninfluenced by any western tradition. Its findings corroborate the claim that finite relative clauses define primarily the theme or topic of a relative-correlative sequence.
In premodern Indo-Aryan, attributive clauses which do not contribute to the theme-rheme profile have rather the form of participial clauses. Finite relative clauses and participial clauses have quite different pragmatic values.

Selected Bibliography
Daneš, František, ed. (1974): *Papers on Functional Sentence Perspective*. The Hague, Paris: Mouton.
Delbrück, Bertold (1878): *Die Altindische Wortfolge aus dem Çatapathabrāhmaṇa. Syntaktische Forschungen III. Halle 1878.*
Delbrück, Bertold (1888): *Altindische Syntax. Halle an der Saale*. (Unveränderter Nachdruck der 1. Aufl. Darmstadt: Wissenschaftliche Buchgesellschaft 1976)
Etter, Annemarie (1985): *Die Fragesätze im Ṛgveda*. Berlin, New York: De Gruyter.
Hale, Mark (2018): *The syntax of Indo-Iranian. Handbook of comparative and historical Indo-European linguistics. An international handbook*, ed. by Jared Klein, Brian Joseph, Matthias Fritz. Berlin, Boston: De Gruyter Mouton,2018; p.1924–1942.
Hettrich, Heinrich (1988): *Untersuchungen zur Hypotaxe im Vedischen*. Berlin, New York: de Gruyter.
Hock, Hans Henrich (2016). Finite and nonfinite subordination. Hock, H.H. / Bashir, E.: *The Languages and Linguistics of South Asia. A Comprehensive Guide*. Berlin, Boston: De Gruyter Mouton 2016; p. 567–584.

Kachru, Yamuna (1978): On Relative Clause Formation in Hindi-Urdu. *Linguistics* 207 (1978), S. 5–26.

Kachru, Yamuna (1980): *Aspects of Hindi Syntax*. Delhi: Manohar.

Lehmann, Christian (1984): *Der Relativsatz. Typologie seiner Strukturen, Theorie seiner Funktionen, Kompendium seiner Grammatik*. Tübingen: Narr.

Porzig, Walter (1923): Die Hypotaxe im Rigveda. Erstes Stück. Die durch das Pronomen ya charakterisierten Sätze und syntaktischen Gruppen in den älteren Büchern des Rigveda. *Indogermanische Forschungen* 41, S. 210–303.

Renou, Louis (1961): *Grammaire et Poétique en sanskrit. Études védiques et pāṇinéennes 8*. Paris 1961; S. 105–131. Repr. in: J. F. Staal (ed.): A Reader on the Sanskrit Grammarians. Delhi: Motilal Banarsidass 1985; S. 478–499. (11972)

Speijer, J. S. (1886): *Sanskrit Syntax*. Leiden. (Repr. Delhi: Motilal Banarsidass 1973)

Weber, Heinrich (2010): Seit wann kennt man Nebensätze? Tóth, J. (Ed.): *Die Sprache und ihre Wissenschaft zwischen Tradition und Innovation. Akten des 45.* Linguistischen Kolloquiums in Veszprém 2010. Frankfurt am Main etc: Lang, 2015; p.303–314.

[69] *Writing Disturbances of Schizophrenic Patients in Kerala: A Linguistic Approach Examine the errors in the various linguistic levels of psychiatric patients in Kerala* ─ Atheena Moolampally, English and Foreign Language University, Hyderabad, India

The studies on language and the human brain remain as a significant target for most of the linguists to date and are always limited and complicated while considering schizophrenic patients. WHO defines schizophrenia as a severe mental disorder characterized by profound disruptions in thinking, affecting language, perception and the sense of the self.

The research proposed tries to link between language and schizophrenia and the psycho-socio interference with such people. In terms of the intersection of language and thought in schizophrenia established by the scholars, I situate my argument on the language variation, especially the errors that occur in the writing mode of schizophrenic patients and comparing them with healthy subjects.
In doing so, I reconsider the causal connection between psychology with linguistics. But the analysis will be purely on a linguistic point of view emphasizing on the writing errors that occur in terms of the treatment. I shall be questioning the existence of language as a separate entity that affected by schizophrenia.

Since the majority of the previous studies and the documentation are centered in the English language, the study on medical practices and the language understanding in the East seem to be limited. The study deals with Malayalam which falls under Dravidian language family and majorly spoken in Kerala.

References

Barch DM, Berenbaum H (1996) "Language production and thought disorder in schizophrenia". J Abnorm Psychol, February, Vol.105, issue1, pp 81-8.

Ganesh Gopalakrishna, Arpit Aggarwal, and John Lauriello (2013). "Long-Acting Injectable Aripiprazole". Clinical Schizophrenia & Related Psychoses. July, Vol.7, issue2, pp. 87-92.

Glenn D. Shean (1999) "Syndromes of schizophrenia and language dysfunction". *Journal of Clinical Psychology*, February, Vol.55, issue2, pp 233-240.

James E Dugan (2014). "Second language acquisition and schizophrenia". *Second Language Research*. July, Vol.30, issue3, pp 307-321).

MichaelA.Covington (2005). "Schizophrenia and the structure of language: The linguist's view". *Schizophrenia Research*, September, Vol.77, issue1, pp 85-98.

NC Andreasen, WM Grove (1986). "Thought, language, and communication in schizophrenia: Diagnosis and prognosis". *Schizophrenia Bulletin*, Vol.12, issue3, pp 348-359.

R.L.C. Mitchell (2005). "Right hemisphere language functions and schizophrenia: the forgotten hemisphere?". Brain. May, Vol.128, issue5, pp 963–978.

Marcia Radanovic (2012). "Formal Thought Disorder and language impairment in schizophrenia". *Arquivos de Neuro-Psiquiatria*, Vol.71, issue1, pp 55-60.

[70]   *Vowel Harmony in Kashmiri* — Sadaf Munshi, University of North Texas, USA & Jessica Mortensen, University of North Texas, USA

This study investigates the vowel structure of Kashmiri (Indo-Aryan, Dardic). Using diachronic analysis we argue that Kashmiri exhibits a bound vowel harmony that triggers assimilation of the final vowels in stems to the backness and roundness of the high vowel in a suffix.

We compare cognates in Kashmiri with forms associated in Middle Indo-Aryan and Old Indo-Aryan, which are evidence for systematic assimilation of vowels in a word's stem to underlying vowel suffixes, -*i* and -*u* for feminine and masculine suffixes respectively. These high suffixes trigger assimilation to occur in the vowel(s) in the attached stem, shifting neutral vowels such as /a/ to match for backness and roundness, resulting in changes (1) with [+round, +back] /o/ and [-back, -round] /ə/. The regularity of these assimilation patterns in vowels indicate that vowel harmony has developed in Kashmiri, distinguishing Kashmiri from the other Dardic languages.

Having determined patterns of vowel harmony in other languages such as Turkish and Yawelmani, we can draw similarities to the affects we can see within Kashmiri. Although the underlying gender suffixes are not apparent on the surface form, the systematicity of vowel harmony in regard to gendered lines makes the relationship apparent. The assimilation of stem vowels to succeeding vowels is also observed in other Indo-Aryan languages such as Hindi, Punjabi, and Bengali, establishing a precedent within the Indo-Aryan family.

This work continues descriptive studies of Kashmiri, a lesser-studied Indo-Aryan language, and helps interrogate its distinguishing features from other Dardic languages, which do not exhibit vowel harmony. We also provide data on a series of Kashmiri cognates back to Old Indo-Aryan, which can be used in a larger study on the development of vowel harmony diachronically.

Examples

TABLE 1

Masc.	Fem.	Gloss	MIA	OIA
op	*əp*	'mean, of low degree'	*appa-*	*alpa-*

References

Allen, W. S (1953: reprinted in 1961). *Phonetics in Ancient India*. London, Oxford University Press, New York, Toronto.

-------------- (1959). Indo Aryan. *Phonetica*. vol.4: pp 33-6.

Bailey, T. G (1937). *The pronunciation of Kashmiri*. London: R A S (James G. Forlong Fund, vol. 16).

----------------(1938). *Studies in North Indian Languages*. London: Lund, Humphries.

Beames, John (1970). A Comparative Grammar of the Modern Aryan languages of India. New Delhi: Munshiram Manoharlal.

Bhat, Roop Krishen (1987). *A Descriptive Study of Kashmiri*. Delhi: Amar Prakashan.

Bloch, Jules (1965). *Indo-Aryan from the Vedas to modern times* (Translated into English by Alfred Master). Librairie D'Amerique Et D'Orient. Paris.

----------------(1970). *The Formation of The Marathi Language* (Translated into English by Dr. Dev Rag Chanana), Moti Lal Banarsidass, (Delhi, Patna, Varanasi,) India.

Bubenik, Vit (1996). *The Structure and Development of Middle Indo-Aryan Dialects*. Delhi: Motilal Banarsidass Publishers.

Ewen, Colin J. and Harry van der Hulst (2001). *The Phonological Structure of Words: An Introduction*. Cambridge University Press, Cambridge.

Goldsmith, John A (ed. 1999). *Phonological Theory: The Essential Readings*. Blackwell Publishers Inc. Massachusetts, USA; Blackwell Publishers Ltd, Oxford, UK.

Grierson, George A. (1906). *The Pisaca Languages of North-Western India*, Asiatic Society Monographs. vol. 8, London.

----------------------------(1919). *The Linguistic Survey of India*. vol. 8, Part II. Calcutta.

Junghare, I. Y. (1979). *Topics in Pali Historical Phonology*. Delhi: Motilal Banarasidass.

Kachru, Braj B. (1969) 'Kashmiri and other Dardic Languages' in Sebeok, Thomas A. (ed.) *Current Trends in Linguistics*. vol 5. Linguistics in South Asia. Mouton, The Hague. Paris.

Katre, S. M. (1965). Some problems of historical linguistics in Indo-Aryan. Poona: Deccan College.

----------------(1968) *Problems of reconstruction in Indo-Aryan*. Simla: Indian Institute of Advanced Study.

Kelkar, Ashok R. and P.N. Trisal (1964). Kashmiri Word Phonology. *Anthropological Linguistics* 6.1.

Kenstowicz, Micheal and Charles Kisseberth (1974). *Generative Phonology: description and Theory*. Academic Press, Inc. London.

Kenstowicz, Micheal (1994). *Phonology in Generative Grammar*. Blackwell Publishers, Cambridge,Massachusetts.

Kirchner, Robert (1996) 'Synchronic Chain Shifts in Optimality Theory' in *Linguistic Inquiry*, 1996, vol.27,N.2, p-341.

Leitner, G. W. (1893, 1996). *Dardistan*. Weis Publications, Srinagar, Kashmir.

Masica, Colin P. (1991). *The Indo-Aryan Languages*. Cambridge University Press, Cambridge.

Mathangwane, Joyce T. (1999). *Ikalanga Phonetics and Phonology: A Synchronic and Diachronic Study*. CSLI Publications, Center for the Study of Language and Information, Stanford, California.

Morgenstierne, George (1941). The Phonology of Kashmiri. *Acta Orientali*a 19.1: 79-99. Reprinted in 1973 in *Irano-Dardica*. Wiesbaden. Dr. Ludwig Reichert Verlag.

Namus, M. S. (1962). 'The Origin of Shina language' in *Pakistani Linguistics*. 55-60, Lahore.

Rajendra Singh (ed.) (1999) *The Yearbook of South Asian Languages and Linguistics*, 1999.

Prem Singh (unpublished). 'Classification of Kashmiri and the History of Kashmiri Consonantism.'

Pushp, P. N. (1958). 'Kashmiri' in *The Languages of India: A Kalesdoscopic Survey*, ed. V.K. Narasimhan et al. 45-47, Madras.

Ramarao, C. (1974). 'Vowel Harmony in Telugu' in *Indian Linguistics*.

Sen, Sukumar (1960). *A Comparative Grammar of Middle Indo Aryan*. Linguistic Society of India, Deccan College, Poona – 6.

Turner, R. L. (1966). A Comparative Dictionary of the Indo-Aryan Languages, vol.1. London.

Vago, Robert M (ed.) (1977). *Issues in Vowel Harmony. Studies in Companion Series 6.* John Benjamins Publishing Company.

Varma, Siddheshwar (1961). *Critical Studies in the Phonetic Observations of Indian Grammarians*. Munshi Ram Manohar Lal Oriental Publishers and Booksellers, Delhi.

----------------------------(1964). *Syllabication in the Kashmiri language*. In honour of Daniel Jones, London.

Walker, Rachel. (2005). 'Weak Triggers in Vowel Harmony'. In *Natural Language and Linguistic Theory*. 23:917.

Zimmer, Karl E. (1967). "A note on vowel harmony" in *International Journal of American Linguistics*. 33: 166-77.

Zograph, G. A. (1983). *Languages of South Asia*. London*:* Routledge & Kegan Paul.

Additional literature

Anderson, Stephen R. 1980. Problems and perspectives in the description of vowel harmony. In: Vago (ed.), pp. 1-48.

Archangeli, Diana B., & Douglas Pulleyblank. 2007. Harmony. In: Paul deLacy (ed.), The Cambridge handbook of phonology, Cambridge University Press, pp. 353-378.

Beckmann, Jill. 1997. Positional faithfulness, positional neutralisation and Shona vowel harmony. *Phonology* 14: 1-46.

Beckmann, Jill. 1999. Positional faithfulness. Garland.

Calabrese, Andrea. 1988. Towards a theory of phonological alphabets. Ph.D. dissertation, MIT.

Gafos, Adamantios I., & Amanda Dye. 2011. Vowel harmony: Transparent and opaque vowels. In: Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume, & Keren Rice (eds.), The Blackwell companion to phonology, Wiley-Blackwell, vol. 4, pp. 2164-2189.

Kaun, Abigail. 1995. The typology of rounding harmony: An Optimality Theoretic approach. Ph.D. dissertation, UCLA.

Krämer, Martin. 2003. Vowel harmony and correspondence theory. Mouton de Gruyter.

Lindsey, Geoff, & Andrew Nevins (eds.) 2017. Sonic Signatures. Benjamins.

Lloret, Maria-Rosa. 2007. On the nature of vowel harmony: Spreading with a purpose. In: Antonietta Bisetto & Francesco Barbieri (eds.), Proceedings of the XXXIII Incontro di Grammatica Generativa, U. di Bologna, pp. 15-35.

Mahanta, Shakuntala. 2007. Directionality and locality in vowel harmony: With special reference to vowel harmony in Assamese. LOT.

Majors, Tivoli. 1998. Stress-dependent harmony. Ph.D. dissertation, University of Texas, Austin.

Nevins, Andrew. 2010. Locality in vowel harmony. MIT Press.

Przezdziecki, Marek Andrzej. 2005. Vowel harmony and coarticulation in three dialects of Yoruba: Phonetics determining phonology. [Cornell University dissertation.]

Ringen, Catherine Oleson. 1980. Vowel harmony: Theoretical implications. University Microfilms.

Rose, Sharon, & Rachel Walker. 2011. Harmony systems. In: John Goldsmith, Alan Yu, & Jason Riggle (eds.), Handbook of phonological theory, 2nd ed., Blackwell, pp. 240-290.

Sasa, Tomomasa. 2009. Treatment of vowel harmony in Optimality Theory. [Publisher unknown, if any.]

Shiraishi, Hidetoshi, & Bert Botma. 2017. On the diachronic origin of Nivkh height restrictions. In: Lindsey & Nevins (eds.), pp. 201-214.

Vago, Robert M. (ed.) 1980. Issues in vowel harmony: Proceedings of the CUNY Linguistics Conference on Vowel Harmony, May 14, 1977. Benjamins.

Vago, Robert M. 1994. Vowel harmony. In: R.E. Asher (ed.), The encyclopedia of language and linguistics, Pergamon, [1st ed.], vol. 9, pp. 4954-4958.

van der Hulst, Harry. 2017. Deconstructing tongue root harmony systems. In: Lindsey & Nevins (eds.), pp. 73-100.

van der Hulst, Harry, & Norval Smith (eds.) 1988. Features, Segmental Structure and Harmony Processes (Linguistic Models Series, parts 1 and 2). Foris.

van der Hulst, Harry, & Jeroen van de Weijer. 1995. Vowel harmony. In: John A. Goldsmith (ed.), The handbook of phonological theory, [1st ed.], Blackwell, pp. 495-534.

Vasilyeva, Lena. 2017. Production and perception of vowel harmony: Phonological predictors of ratings and on-line adaptations of Russian vowels in Yakut (Sakha). University of Alberta.

Walker, Rachel. 2001[a]. Round licensing, harmony, and bisyllabic triggers in Altaic. Natural Language and Linguistic Theory 19.4: 827-878.

Walker, Rachel. 2001[b]. Positional markedness in vowel harmony. In: Caroline Féry, Antony Dubach Green, & Ruben van de Vijver (eds.), *Proceedings of HILP*, vol. 5, Linguistics in Potsdam, vol. 12, University of Potsdam, pp. 212-232.

Walker, Rachel. 2005. Weak triggers in vowel harmony. Natural Language and Linguistic Theory 23.4: 917-989.

Walker, Rachel. 2011. *Vowel patterns in language*. Cambridge University Press.

Walker, Rachel. 2012. Vowel Harmony in Optamality Theory. *Language & Linguistics Compass* 6.9: 575-592.

[71]   *On the Syntax of Compative iva-Clauses in Vedic Sanskrit* — Mark Hale, Concordia University, Montréal, Canada & Madelyn Kissock, Concordia University, Montréal, Canada

In this paper, we explore aspects of the syntax of *iva*-comparatives in Vedic Sanskrit, focussing on the evidence provided by the Rig- and Atharvaveda. MacDonell (1916: §180, s.v. *iva*—a virtual translation of Grassmann's entry, s.v. *iva*) describes the most frequent usage of *iva* in the Rigveda (and the only one that will interest us) as:

> **iva** …means *as if, as, like* in abbreviated similes in apposition, never introducing a clause like **yáthā**. It follows the word with which comparison is made; if the comparison consists of several words, the particle generally follows the first, less commonly the second.

There are several aspects of the syntax of interest, as already indicated by MacDonell's statement. In saying that *iva* is found in "abbreviated similes… never introducing a clause like *yáthā*" MacDonell is saying that there is never an *overt verb* in the *iva*-clause. Why should this be the case?

Second, MacDonell notes that *iva* "generally" follows the first word of the comparison — but some- times occurs later in the clause. What is the nature of this apparent freedom of placement? Is it subject to any restrictions? Can those restrictions help us understand the processes that cause *iva* to appear earlier, rather than later, in the comparison?

These issues will form the focus for a set of concerns, but we will touch upon them in the general context of wealth of related issues, including:

a. What kinds of mismatch between the properties of the main clause verb and those of the (implied) *iva*-clause verb is permitted? For example, Jamison (1982) has shown quite clearly that a verb in the middle may express one middle function ('pseudo-reflexive') in the main clause, and another in the *iva* clause, but it appears that an active verb in the main clause cannot be used with an (implied) passive-function middle in the *iva* clause.
b. Word order issue 1: What are the word order possibilities of the elements which make up the *iva* clause? That is, what is the *internal* syntax of the *iva* clause?
c. Word order issue 2: What determines where *iva* is placed amongst the elements of the *iva* clause? That is, what is the syntax of *iva* itself, and how does this relate to, e.g., more general Wackernagel's Law-like phenomena?
d Word order issue 3: What determines the positioning of the *iva* clause itself relative to the ele- ments of the main clause? That is, what is the *external* syntax of the *iva* clause?

To take a concrete example, examine AVP 6.6.6ab:

(1) sindhuprajāno   *madhugho*
    Sindhu-born-NomSg   madhugha-NomSg
    aśva   iva   nīyate janāṁ   anu
    horse-NomSg IVA is led   men-APl   among
    'Madhugha is led like a Sindhu-born horse among men.' (Griffiths 2009: 84)

The translation of Griffiths takes *sindhuprajāno* 'born in the Sindhu' to be a modifier of an element of the *iva*-clause (*aśvaḥ* 'horse'). But is this *syntactically* possible, or should the adjective be taken as the modifier of the (plant) *madhugaḥ*?

We will argue, on the basis of a comprehensive survey of the data of the Rig- and Atharva-vedas, that Griffiths' interpretation *can be* excluded, given the structure of embedded *iva*-clauses. In particular, two properties of the text under Griffiths' interpretation run counter to the observed data: first, although, as MacDonell and Grassmann already noted, *iva* can come later in the comparison that after the first word, such postponement is syntactically precluded if the *iva*-clause itself is 'discontinuous' (i.e., is interrupted by elements from the matrix clause). Under his interpretation, *madhugaḥ* 'interrupts' the *iva*-clause, but *nevertheless*, the particle *iva* is in the rarer 'postponed' position. This is not possible, based on our survey of the data.

Secondly, when we examine what types of 'discontinuity' of *iva*-clauses is permitted in these Vedic texts, it turns out that the *only* element from the matrix clause which is permitted to intervene in the *iva*-clause is the verb (with its preverb). Griffiths' interpretation violates this second generalization as well.

The paper concludes with a diachronic sketch of the historical syntax of *iva*-clauses which takes this latter generalization — the fact that the *iva*-clause can only be 'interrupted' by the final verb from the matrix clause — as being intimately connected to the fact that *iva*-clauses are not permitted to have their own verb (as MacDonell pointed out in his contrast with *yathā*-clauses). The basic idea is simple: since the verb of the matrix clause is always the same as the verb of the *iva*-clause, one of them regularly stood in ellipsis. Structures in which the matrix clause verb stood in ellipsis and the only overt verb was the overt verb in the *iva*-clause were subjected to a diachronic reanalysis whereby the overt verbs were treated as representing the matrix verb. Thus the matrix verb came to be allowed to interrupt the *iva*-clause, and the *iva*-clause itself was subject to an absolute ban on containing its own verb.

References
Bergaigne, Abel. 1887. La syntaxe des comparaisons védiques. *Mélanges Renier*, 75-101. Paris: Vieweg. Brereton, Joel. 1982. The particle *iva* in Vedic Prose. *JAOS* 102: 443-450.
Griffiths, Arlo. 2009. *The Paippalādasaṃhitā of the Atharvaveda, Kāṇḍas 6 and 7: a new edition with translation and commen- tary* (Groningen Oriental Studies XXII). Groningen: Egbert Forsten.
Jamison, Stephanie. 1982. Case disharmony in Rigvedic similes. *IIJ* 24: 251-271.
Pinault, Georges-Jean. 2004. On the usages of the particle *iva* in the Rigvedic hymns. In *The Vedas: texts, language and ritual*. Arlo Griffiths and Jan Houben (eds.). Groningen: Forsten.
Schrapel, Dieter. 1970. *Untersuchung der Partikel iva und anderer lexikalisch-syntaktischer Probleme der vedischen Prosa nebst zahlreichen Textemendationen und der kritischen Übersetzung von Jaiminīya-Brāhmaṇa 2,371-373 (Gavāmayana I)*. Dissertation, Marburg.
Vine, Brent. 1978. On the metrics and origin of Rig-Vedic *ná* 'like, as'. *IIJ* 20: 171-193.

[72]   *The complementizing verb in- (iḍ-) 'say' in Kota* ─ Wojciech Zeyland, Adam Mikiewicz University in Poznan, Poland

The verb 'say' has been grammaticalized to a complementizer in many languages (Lord, 1976; Heine and Kuteva, 2002: 261-265) . It is well-known in this function in languages of South Asia where it is employed by many (although not all) languages that belong to Dravidian, Indo-Aryan, Munda and Tibeto-Burman families (Subbārāo, 2012: 201). In Dravidian, the verb 'say' (DEDR 868) is of special prominence since it allows for occurance of multiple finite predicates in a sentence (Steever, 1988) . In languages like Tamil or Telugu various forms of the verb 'say' have a wide array of functions, not only in the domain of complementation: they mark reported speech, conditional, desiderative, causal and purposive clauses, they function as adverbializer etc. (Krishnamurti and Gwynn, 1985: 363-374; Lehmann, 1993: 322-330, 373-377; Saxena, 1995).

In this paper I examine Kota, a little studied (Emeneau, 1944-1946; Subbiah, 1985) Dravidian language spoken by some 2000 people in the Nilgiri Mountains. The goal is to see what functions are attached to various forms of the verb *in-* (*iḍ-*) 'say' and to scrutinize their syntactic and semantic properties. The data for the analysis come from four volumes of Kota texts collected by Emeneau (1944-1946).

Preliminary study shows that, as might be expected, *in-* is involved in reporting speech. In example (1) it has its full lexical meaning and is subjected to regular inflection where it agrees with the subject. No other element is put between the verb and its complement. The absence of any complementizer in (1) is indicative of complementizing property of the verb *in-* itself (cf. Lehmann, 1993: 319). In example (2), on the other hand, its present participle form *iḍr* precedes the main verb *aṛd-* (*ayd-*) 'say' and is lexically empty, acting as a complementizer which links the embedded clause to the matrix clause.

(1) [*a:m take:m*]   *iḏa:re:*
    we give:FUT:1PL.EXCL   say[PST]:3:PL:EMP
    'They said: We will give (it to you).' (Emeneau, 1946c: 234; section 12)

(2) *a   mu:nḏ mognm   a:tṯ   [[a:ḷk   oḏ oḏ   eytṯ*
    that three   son:ACC:INCL call:PST.PTCP   man:DAT one one take:PST.PTCP
    tinm]   *iḏr*]   *ayda:ne:*
    eat:IMP.PL say:PRS.PTCP   say[PST]:3:MSG:EMP
    'He called those three sons and said: Take one (plate) to each person and eat!.' (Emeneau, 1944: 38; section   25)

Cursory examination suggests that *iḏr* is the most frequent form of this verb. Aside from introducing reported speech, it can mark complement clauses of a Fact type (Dixon, 2010: 389), for instance, with the verb *ayr* (*arč*) 'know, realize', as in the following example:

(3)[[*id   ala: čeṭ očd   nayr kive:*]   *iḏr*]   *arčṯ*
     this bad   odor beat:NOMI jackal pus:EMP say:PRS.PTCP know:PST.PTCP
    'Realizing that this is the jackal's pus which gives a bad odor...' (Emeneau, 1946a: 256; section 35)

A form of the verb *in-* embedding a clause occurs also with nouns such as *nambyk* 'belief', as in example (4):

(4)*a:nme:l*   [[*id enk   čikugo:*] *iḏd*]   *nambyko:ṛ a:n oḷd   ala:d*
    but   this I:DAT get:FUT:3 say:NOMI belief:SOC I   be:NOMI not.only
    'But not only am I with the belief that I will get this.' (Emeneau, 1946c: 270; section 22)

Other contexts involving the verb *in-* in Kota will be discussed and their syntactic analysis will be presented.

References
Burrow, T. and Emeneau, M. B. (1984) (2nd edn) *A Dravidian Etymological Dictionary* (DEDR). Oxford: Clarendon Press.
Dixon, R. M. W. (2010) *Basic Linguistic Theory. Volume 2: Grammatical Topics*. Cambridge: Cambridge University Press.
Emeneau, M. B. (1944) *Kota Texts: Part One*. Berkeley and Los Angeles: University of California Press.
Emeneau, M. B. (1946a) *Kota Texts: Part Two*. Berkeley and Los Angeles: University of California Press.
Emeneau, M. B. (1946b) *Kota Texts: Part Three*. Berkeley and Los Angeles: University of California Press.
Emeneau, M. B. (1946c) *Kota Texts: Part Four*. Berkeley and Los Angeles: University of California Press.
Heine, B. and Kuteva, T. (2002) *World Lexicon of Grammaticalization*. Cambridge: Cambridge University Press.
Krishnamurti, B. and Gwynn, J. P. L. (1985) *A Grammar of Modern Telugu*. Delhi: Oxford University Press.
Lehmann, T. (1993) *A Grammar of Modern Tamil*. Pondicherry: Pondicherry Institute of Linguistics and Culture.
Lord, C. (1976) 'Evidence for Syntactic Reanalysis: From Verb to Complementizer in Kwa', in Steever, S. B., Walker, C. A., and Mufwene, S. S. (eds) *Papers from the Parasession on Diachronic Syntax*. 1st ed. Chicago: Chicago Linguistic Society, pp. 179–191.
Saxena, A. (1995) 'Unidirectional grammaticalization: diachronic and cross-linguistic evidence', *Sprachtypologie und Universalienforschung*, pp. 350–372.
Steever, S. B. (1988) *The Serial Verb Formation in the Dravidian Languages*. Delhi: Motilal Banarsidass.
Subbārāo, K. V. (2012) *South Asian Languages. A Syntactic Typology*. Cambridge: Cambridge University Press.
Subbiah, G. (1985) *Grammar of Kota*. Annamalainagar: Annamalai University

[73]   *Emergence of abstract meaning in Indo-Aryan verb-verb sequences* — Peter Edwin Hook, University of Virginia and Michigan

All modern Indo-Aryan languages have verb-verb sequences of several types. In one of those types the second verb (V2) in a sequence has lost its basic lexical meaning. In (1) the V2 *gaī* in the verb-verb sequence *pahŭč gaī* does not express motion away – unlike its homophonous counterpart in the basic lexicon [for example, *gaī* in (2)]:

1. *xabar mil-ne-par   pulis   bhī yahãã   **pahŭč   gaī***   Hindi-Urdu
   news get-Inf-on   police also here   **arrive WENT**
   'On getting the news the police showed up here, too.'   [*www.amarujala.com*]
2. *ekspres nirdhārit samay-se ek   ghaṇṭe pahle pleṭphārm-par **pahuñc-kar   gaī**.*
   express scheduled time-from one   hour   before platform-at   **arrive**-GER **went**
   'The Express arrived at the platform one hour ahead of schedule and left …'
   jis.ke kāraṇ   jālandhar-meṁ 23 logoṁ-kī   ṭren chūṭ bhī gayī.
   which reason Jalandar-in   23 people-GEN train miss also WENT
   '…which resulted in 23 people in Jalandar missing their train.'   [newsindialive.in]

V2s which like *gaī* in (1a) do not have their basic lexical sense are known as 'vectors' (Pray 1970). Verb-verb sequences in which they occur are termed here as 'vectored verbs'.

There exist V2s which retain some part of their lexical sense in verb-verb sequences:

3. *maiṁ bāhar nikal-kar sīdhe   apnī māṁ-ke.pās **bhāg gaī**.*
   I   out   exit-GER straight self's mother-near **flee went**
   'I went out and ran straight to my Mother's place.'   [from *Kiran Bedi's* गलती किसकी भाग-1]

V2s like *gaī* in (3) I term 'factors' (rather than 'vectors'). Verb-verb sequences in which they occur are 'factored verbs'.

In this paper I will present a comparison of Hindi-Urdu verb-verb sequences with those of Marathi and Gujarati. Although such sequences in Marathi and Gujarati are less frequent than they are in Hindi-Urdu, we have good evidence for their increase (at least in Marathi) in a time-series of counts over the past six or seven centuries. Assuming that expansion in their use and scope in Marathi and Gujarati will continue along a path similar to the path taken by their more vector-rich peer Hindi-Urdu, I make use of the differences between verb-verb sequences in the these three languages as a way to sketch a scenario for the replacement of factored verbs by vectored verbs over time and put forward an explanation for that gradual replacement as being the consequence of the progressive assumption of more abstract semantic and grammatical functions by vector verbs like *jā- / dzā-* GO, *de- / āp-* GIVE and *le- / ghe-* TAKE. As shown in many studies such gradual replacements are a typical feature of grammaticalization: More specific lexical phenomena yield over time to encroachment by more general [hence more abstract] grammatical ones (Andersen 2003; Hopper & Traugott 1993).

References
Andersen. Henning. 2003. *Actualization: Linguistic change in progress.* John Benjamins.
Hopper, Paul. & Elizabeth C. Traugott. 1993 Grammaticalization. Cambridge University Press
Pray, Bruce. 1970. *Topics in Hindi-Urdu Grammar*. U-Cal at Berkeley dissertation.

[74] *The Curious Case of Mech Phonemes: An analysis of the Phonemic Oppositions* — Mudafia Zafar Jadavpur University, Kolkata; India; Swarnendu Moitra Jadavpur University, Kolkata; India

Generally phonemes of a language contrast in the presence or the absence of a feature 'x' keeping the other feature 'y' constant. The language Mech[1] does not align itself with this pattern and hence is unique in the linguistically diverse area of West Bengal[2]. In the Indian Subcontinent, consonants are generally distributed in the following ways:

[-voiced, -aspirate] | [-voiced, +aspirate]
[+voiced, -aspirate] | [+voiced, +aspirate]

Eg. Bangla[3] has the following bilabial plosives:
/p/ /pʰ/ /b/ /bʰ/

But in Mech, consonants are distributed in only one of the two following ways:

[-voiced, +aspirate] | [+voiced, -aspirate]
Eg. /pʰ/ /b/

The pairing is made in such a way that voicing and aspiration are in complementary distribution. Traditionally the phoneme inventory of a language has been viewed as a collection of phonemes which are in contrastive distribution. However, according to the Prague School of Linguistics[4], the phonemic system of a language is considered as a complex and contrasting network of interacting oppositions. Analysis of the oppositional system of a language takes place by decomposing them to a set of features. "In Trubetzkoy's view, the interlocking system of oppositions takes priority over the phoneme inventory: the major role in phonology is played not by the phonemes themselves, but by the oppositions they enter into" (Lass, 42).The paper explores the types of oppositions that Mech phonemes enter into and thereby understand the (a)symmetries and (in)congruities in its formal structure.

Natural language data via the questionnaire method was collected from native speakers of Mech residing in the Chhekamari village of Madarihat, Alipurduar district; West Bengal, India over a period of five consecutive days. All speakers were bilingual with Bengali being the second language. A majority were multilingual with Hindi, English, Sadri and/or Nepali among the other spoken languages. The speech was recorded using voice recording devices and transcribed according to the conventions of The International Phonetic Alphabet.The software Praat and Audacity were employed for speech segmentation and analysis of the sounds.

1. Mech is a 'severely endangered' Tibeto-Burman language, spoken in the North Eastern part of West Bengal. It co-exists among native speakers of at least five different languages- Bengali, Nepali, Rabha, Sadri, Toto.
2. A state in the eastern part of India.
3. The official language of West Bengal
4. "School of linguistic thought and analysis established in Prague in the 1920s by Vilém Mathesius. It included among its most prominent members the Russian linguist Nikolay Trubetskoy and the Russian-born American linguist Roman Jakobson" Encyclopædia Britannica

References
Abbi, Anvita. *A Manual of Linguistic Field Work*. LINCOM Europa, 2001.
"Boro." Ethnologue, www.ethnologue.com/language/brx.

Katamba, Francis. *An Introduction to Phonology*. Longman, 1993.
Lass, Roger. *Phonology: An Introduction to Basic Concepts*. Cambridge University Press, 2000.
"Mech" Mech in UNESCO Languages Atlas, http://www.unesco.org/culture/languages-atlas/en/atlasmap/language-id-1195.html
"Prague School." *Encyclopædia Britannica, Encyclopædia*

[75]   *Inflectional Morphology of Pahari Nouns* — Ayesha Zafar, PhD Scholar, University of Gujrat, Gujrat, Pakistan & Riaz Ahmed Mangrio University of Gujrat, Punjab, Pakistan

This research investigates the process of inflectional morphology of Pahari nouns. The theoretical framework of Plag (2003) is selected in order to investigate the affixation process in inflectional morphology of Pahari nouns. Moreover, it analyzes morphology in free and bound morphemes. Furthermore, it tries to document nominal inflectional affixes. The collection of analyzed analyzed was done through discourse centered method. For this purpose, Pahari programmes on TV, and Pahari songs on radio were followed. Similarly, the native speaker's innate knowledge is also used for the collection of data. The analysis focuses on the affixation processes. It highlights aspects like classification of Pahari affixes according to their functions, positions as well as their influences on root forms. The investigation proves that inflectional morphology of Pahari nouns is highly productive. In addition, it investigates that process like allomorphy is common in Pahari morphology. Further, it proves that affixes are used only at suffix position for inflectional purposes and the semantic as well as the phonological barriers are consisted in selecting one affix over the other.

It is investigated that Nouns of Pahari language observe the phenomenon of inflectional morphology. Plag's (2003) view fully supports this analysis that affixes are classified on the bases of their function and position. It is also (Plag, 2003; Aronoff, 2011; and shahid, 2014) supported by researchers claim about the nature of inflection that inflection is made syntactically and it is also maintaining.

Plag's (2003) view also supports that inflectional properties help to differentiate different grammatical categories like person, gender, case, number, tense and aspect etc. In Pahari, the suffix [-ian] is an inflectional plural marker and it attached with the nominal base 'kukri' (hen) and 'kuri'(girl) to form the plurals 'kukrian'(hens) and 'kurian'(girls). Similarly, the research highlights a type of affixes as nominal inflectional affix. Moreover, nominal affixes are sub-classified as affixes for different cases like plural and Possessive case and gender case etc. The suffixes '-yaan', '-aan','-ay','-a', '-naan'and '-neen' etc are nominal inflectional affixes and the suffixes '-yaan', '-aan' and '-ay' are used for plural case. Likewise, the possessive case suffixes are '-naan' and '-neen' and the suffixes '-a',-i' are used for gender case. Additionally, it is concluded that affixes can be divided depending on how they are attached to the base or root words. In Pahari language, no cases of infixation are founded. However Pahari borrows heavily from Urdu. Urdu is the language in which reduplication is occurred for both inflectional and derivational. Similarly, the phenomenon of infixation is not seen in the language as the data didn't provide any instances of it.

The classification of inflectional affixes has been done on the bases of their position according to the kind of roots they are affixed to and it also classified according to their effect on the roots to which they are attached (neutral vs non-neutral). This research provides to be a helpful document in the documentation of the language. Furthermore, it commences a lesser known language to the linguistic community of the world.

References
Albright, A. (2002). The Identification of Bases in Morphological Paradigms. Ph. D. thesis, UCLA.

Anderson, Stephen R., 1985. Inflectional morphology. In: Shopen, Timothy [ed.], Language typology and syntactic description, vol. 3, pp. 150 – 201. Cambridge: Cambridge University Press.

Aronoff, M. & K. Fudeman. 2011. What is Morphology? Oxford: Blackwell.

Aronoff, M. and N. Fuhrhop. 2002. Restricting suffix combination in German and English: Closing suffixes and monosuffix constraints. Natural Languages and Linguistic Theory 20: 451-490

Bickel, B. and Johanna, N. 2006. `Inflectional morphology'. T. Shopen [ed.] Language typology and syntactic description.

Booij, Geert 1994. Against split morphology. Yearbook of Morphology 1993. Geert Booij and Jaap van Marle, eds. Dordrecht: Kluwer.

Booij, Geert. 2007. The grammar of words: An introduction to morphology. 2nd edition: Oxford textbooks in linguistics. Oxford: Oxford University Press.

Booij, G. 2009. Morphological analysis. [to appear in Bernd Heine and Heiko Narrog (eds.), The Oxford Handbook of Grammatical Analysis. Oxford: Oxford University Press, 2009, 563-589]

Greenburg, Joseph H. 1954b. A quantitative approach to the morphological typology of language. Method and Perspective in Anthropology, ed. R. F. Spencer, 192-220. (Reprinted in [2004], 3-25.)

Halle, M., and A. Marantz (1993) "Distributed Morphology and the Pieces of Inflection."

Hallberg, G. D. (1992). Sociolinguistic Survey of Northern Pakistan Volume 4Pashto,Waneci, Ormuri, Published by National Institute of Pakistan Studies, Quaid-i-Azam University Islamabad.

Hameed, Abdul (2011). The syntax of clause structure in Pahari: (Unpublished thesis). University of Azad Jammu & Kashmir, Muzaffarabad

Hay, Jennifer B. & Ingo Plag. 2004. What constrains possible suffix combinations? On the interaction of grammatical and processing restrictions in derivational morphology. Natural language and linguistic theory 22:565–596.

Janssen, M. 2005. Between Inflection and Derivation: Paradigmatic Lexical Functions in Morphological Databases. Em: East West Encounter:second international conference on Meaning – Text Theory. Moscow, Russia.

Katamba, F. (1993). Morphology. London: Macmillan Press Ltd.

Macknezie, D. N. (1987). A Standard Pashto. Bulletin of the School of Oriental and African Studies 22. 231-5

Millar, Robert McColl, 2008 A Companion to the History of the English Language, West Sussex: Blackwell Spencer, Andrew. 1991. Morphological theory. Oxford: Blackwell.

Payne, J. R. (1987). The World's Major Languages. New York: Oxford Unvisity Press

Penzle, H. (1955). A Grammar of Pahari. Washington, D.C: American Council of Learned Society, Ishi Press International.

Shafeeq, D. A. (1964). A Short Grammatical Outline of Pashto. Bloomington: Indiana University; and The Hague: Mouton and Co.

Shahid, M. (2013). Affixation in Hindko Language. M.phil Thesis Submitted to Department of English University of Azad Jammu and Kashmir, Muzaffarabad. (unpublished thesis)

Tegey, H., & Robson, B. (1996). A Reference Grammar of Pashto. Washington, DC.:

Vennemann, Theo (1974). Analogy in generative grammar: the origin of word order. Proceedings of the Eleventh International Congress of Linguists (1972). 79-83. Bologna.

Khan, Abdul Qadir (2013) the Criterion an International Journal in English: A Preliminary Study of Pahari and Its Sound System (Research Article), Muzaffarabad

Yasir, M.(2015). Affixation in Pushto Language. M.phil Thesis Submitted to Department of English University of Azad Jammu and Kashmir, Muzaffarabad. (Unpublished thesis)

[76]   *Control Structures in Kokborok* ― Gargi Roy, Indian Institute of Technology, Madras, India

This study presents a description of the various types of Control structures in Kokborok, a Tibeto-Burman language spoken in Tripura (one of the North-Eastern states of India) and shows the instance of syntactic convergence in control constructions in Kokborok resulted due to the long-sustained contact with the

genetically different language i.e., Bangla[16] (Indo-Aryan) spoken in its close proximity. In Kokborok, the genitive case-marking of the subject in control constructions in the presence of physical ailment predicates and time predicates is an instance of syntactic borrowing from Bangla. Subbarao (2012: 33) suggests that nominative case marked subject is typical of most of the Tibeto-Burman languages. That Kokborok exhibits genitive subject in control construction is plausibly due to syntactic convergence. Bangla is the dominant language in Tripura although both Kokborok and Bangla are the two official languages of Tripura. Thus, both had been in intense contact with each other. Apart from other features, the phenomenon of overt lexical controllee and controlled pro instead of PRO in the infinitival clauses in Kokborok (not so far documented in any South Asian Languages) is unique which foregrounds the traditional approach of PRO to be not the only property of control structures. The study presents evidence in support of the null element to be controlled pro if not PRO in Kokborok as the controlled overt nominal category in the embedded subject position in Kokborok infinitival clauses suggests strong evidence in support of pro as the null category. There is a documentation of overt lexical controllee and controlled pro in Greek and Korean as discussed in Spyropoulos (2007) and Lee (2009) respectively. However, there is no South Asian language which documents the phenomenon of overt controllee and controlled pro as the null element other than Kokborok. Incidentally, it is observed in Agartala Bangla variety too. We provide examples which are illustrative.

The examples in (1)-(3) present the three types of control (Forward, Backward, and Copy Control) in Kokborok and (4)-(5) show the phenomenon of syntactic borrowing. The examples in (6)-(9) illustrate the phenomenon of overt lexical controllee and thus substantiates the existence of controlled pro in Kokborok and Agartala Bangla.

Forward Control in Kokborok

(1) [PRO   *joli-jag-ii*]   *khumti*i   *nɔg-ɔ*   *thaŋ-kha*
    Khumti   anger-em pred-cpm   Khumti   house-to   go-pst
    'Having become angry, Khumti went home.'

Backward Control in Kokborok

(2) [*khɔrɔk-sa*i *phanɔ*   *si-ya-ii-nɔ*]   PROi   *nɔg-ɔ*   *thaŋ-bai-kha*
    CL-one   NPI   know-neg-cpm-emph   house-to   go-everybody-pst
    Literally: 'Not even one person went home without knowing.'
    Intended: Everybody went home without knowing.'

Copy Control in Kokborok

(3) [*khumti*k   *mai*   *ca-ii*]   *khumti*k/*bɔ*k   *skul-ɔ*   *thaŋ-kha*
    Khumti   rice   eat-cpm   Khumti/she   house-to   go-pst
    'Having eaten rice, Khumti went to school.'

Genitive Case-marked subject in Copy Control in Kokborok

(4) [*khumti*i-*ni*   *kulum*   *iŋ-ii*]   *khumti*i/*bɔ*i   *thui-kha*
    Khumti-gen   heat   be-cpm   die-pst
    'Having had a fever, Khumti died.'

Genitive case-marked subject in Copy Control in Agartala Bangla

(5) [*kɔmɔla*i-*r*   *zɔr*   *oi-ya*]   *kɔmɔla*i/*tai*i   *mara*   *gæ-s-e*
    Kamala-gen   fever   be-cpm   die   go-perf.3

'Having had fever, Kamala died.'

Overt controllee in Kokborok
(6) *khumti*$_i$ *phiyɔgnai*$_k$*-nɔ* *sa-kha* (*je*) *bɔ*$_{i/*k/*m}$ *bazar-ɔ* *thaŋ-nani*
    Khumti Phiyognai-acc tell-pst that she market-to go-inf
    'Khumti asked Phiyognai to go to the market.'

Controlled pro in Kokborok
(7) *aŋ*$_i$ *si-ɔ* pro$_i$ *masa-nani*
    I know-pres dance-inf
    'I know to dance.'

NOTE: The embedded clause does not exhibit any lexical category in the subject position in the case of factive verbs and verbs expressing beginning and end of an event such as *know*, *start*, *begin*, *stop*, etc., This becomes more prominent in Agartala Bangla where the infinitival agreement indicates the existence of the null pronominal pro in the embedded subject position. The example in (8) shows occurrence of overt lexical controllee as the subject of the embedded clause which is coreferent with the matrix clause subject and the example in (9) illustrates occurrence of pro in the embedded subject position as the matrix verb *know* does not permit a lexical category as the subject of the infinitival clause.

Agartala Bangla
(8) *ami*$_i$ *kɔmɔla*$_i$*-re* *koi-s-i* *ami*$_i$ *bazar-ɔ* *zai-t-am*
    I Kamala-acc tell-perf Kamala/she market-to go-inf-1
    'I asked Kamala (in order) to go to the market.'
Agartala Bangla
(9) *ami*$_i$ *zan-i* **ami*/pro$_i$ *nas-t-am*$_i$
    I know-pres.1 I dance-inf-1
    'I know to dance.'

References
Lee, K.Y. 2009. *Finite Control in Korean*. Ph.D dissertation: University of Iowa.
Spyropoulos, V. 2007. 'Finiteness and Control in Greek'. In William D. Davies, Stanley Dubinsky (eds.) *New Horizons in the Analysis of Control and Raising*. Dordrechet: The Netherlands: Springer. pp 159-183.
Subbarao, K.V. 2012. *South Asian Languages*: *A Syntactic Typology*. New York: Cambridge University Press.

[77] *Revisiting Ergativity and Agreement in Indian Languages* ― Pradeep Kumar Das, Centre for Linguistics, JNU, New Delhi

The present paper examines some of the structural peculiarities of Indian languages and points out some drawbacks due to current linguistic research available. Some of these structural peculiarities surface when we examine the issues of 'ergativity', 'case and agreement' in the context of some Indian languages. Indian languages allow 'ergativity' as proposed by Dixon (1971) to manifest in partial way and thus, system of 'ergativity' splits in Indian languages. Thus, we have different accounts and explanations for 'Split-ergativity' in Indian languages. However, no scholar to our knowledge has ever provided a 'fuller account' of ergativity in Indian languages.

Secondly, the aforementioned monograph by Dixon on ergativity has never made any direct correlation between 'ergativity' and 'agreement', although ergativity has never been examined without 'agreement'! Unfortunately, this question remains without answer!

It was only Subbarao (2006) who argued for examining the agreement-system and case-marking differently. Now, we know that a case-marker doesn't have to be a blocker for the agreement between subject/object and the verb. However, the systems of agreement such as 'subj-verb agreement', 'object-verb agreement' and 'default-agreement' have still remained obscure and messy due to the prevailing theories of agreement which were proposed on the basis of a handful of Indo-Aryan languages. Let us examine some examples and compare them with Hindi to put forward my own observations concerning agreement and ergativity:

Agreement in Angika:

(1) həmra bʰukʰ lagəl cʰ-e
    I-1S-Dat hunger seem/feel be-pres-1S
    'I am hungry.'
(2) tɔra bʰukʰ lagəl cʰ-ɔ
    You-2S-Dat hunger seem/feel be-pres-2S
    'You are hungry.'
(3) ʊnkʰra bʰukʰ lagəl cʰ-eʰ
    S/he-3S.Hon hunger seem/feel be-pres-3S.Hon
    'S/he(Hon) is hungry.'

These examples from Angika prove a very vital point and support Subbarao's argument that case marker is not the blocker of agreement in every language. If we think of parallel sentences in Hindi, in all of them, we will have objet-verb agreement and the verb won't agree with the dative case-marked subject in Hindi sentences. However, we see that Angika does not follow this constraints of case marking and agreement. Let's consider some more examples:

Agreement in Gujurati:
(4) šilaa-ei   raaj-nej   jagaaD-y-o*i/j√
    S.(F)-ERG R.(M)-Acc awake-PF-M
    'Sheela woke up Raj.'
(5) raaj-ei   šeela-nej   jagaaD-y-i*i/j√
    R.(M)-ERG S.(F)-Acc awake-PF-F
    'Raj woke up Sheela.'

The examples (6) and (7) from Gujarati are very complex and they need lot of explanation and I don't think anyone has ever made this point that why an overt case marked 'direct object' has to trigger the agreement with the verb. This paper provides some answer for this puzzle. At the moment it is good enough to say that the case-marker does not act as a blocker for the agreement in every language in India.

Agreement in Kurmali:
(6) okəri   gɪlasj-ʈa   bʰã̃ŋ-l-ej-ii
    he-3MS.Gen glass.3FS.Def break-Pst.3FS.3MS
    'His glass broke.'
(7) okʰəri   gɪlasj-ʈa   bʰã̃ŋ-l-ej-ini
    he-3MPl.Gen glass.3FS.Def break-Pst.3FS.3MPl
    'Their glass broke.'

(8) tori   beṭa-ṭay   okʰərj   beṭi-ṭi-ke   mɑri de-l-kei-inj
     your   son-3MS.Def their-3MPl-Gen dauther-Acc beat give-Pst-2S-3Pl
     'Your son beat their daughter.'

These examples from Kurmali show one of the most important aspects of grammatical agreement. In the genitive phrase, the possessed noun is the only syntactic unit that verb cares for its syntactic presence in any language that we know so far. However, there is a sociolinguistic reason as to why Kurmali speakers think that the possessor noun should also have some marking and bearing on the verb. I will discuss this in the seminar presentation, but at the moment it suffices the point that case-markers are not the blocking elements in every language with regard to the agreement between nominal and the verb in the sentence.

Agreement in Kinnauri:
(7) gɨ-s   roṭe   jɑ-ø -k
     I-1S-Erg   chapatti   eat-pst -1S
     'I ate chapati'.
(8) ki-s/kɑ-s   roṭe   jɑ-ø -ĩn/-n
     You-2S-H/NH-Erg chapatti eat-pst -2S-H/NH
     'You ate chapati'.
(9) kəšəŋa-s   roṭe   jɑ-ø -č
     we-1Pl-Erg chapatti eat-pst -1Pl
     'We ate chapati' <the verb marker remains same for 2nd Plural>

Similarly, the examples (7-9) from Kinnauri demonstrate that case marker is not a blocking element for the agreement between subject and verb in every language. It is, therefore, very important that we must revisit these notions and at least give a corrigendum into the literature of linguistics so that the new generation of linguists give us some due respect.

Agreement in Nepali:
10. čɨtrəkɑr-le   dʰerɑi čɨtrə   bənɑ-yo
     painter-3MS-Erg many   picture make-pst-3MS
     'The painter made many pictures.'
11. mɑi-le   sodʰpətrə   lekʰ-y-e
     I-1MS-Erg research paper write-pst-1MS
     'I wrote a research paper'.

The above examples in Kinnauri (10-11) show similar fact that the case marker, ergative case in this context, doesn't have to act as a blocker for agreement between the verb and the subject. I will discuss these interesting facts of Kinnauri in my presentation the seminar.

Agreement in Hmar:
(12) kɛi-in   lekʰatʰɔn kɑ   zi:k
      I.1S-Erg letter   1-SAgr write-impf
      'I write a letter.'
(13) kɛi-ni-in   lekʰatʰɔn   ɛi   zi:k-tɑh
      I-Pl-Erg   letter   1Pl.Agr write-pst
      'We wrote a letter.'
(14) lɑli-in   lekhəbu ɑ-pekˋ-če/čeu
      lali-Erg   book   3S-give-2S/2Pl
      'Lali gave you a book'.

(15) rɑm-in   pɑrte   ɑ- mi-pek
     ram-Erg   flower 3S-1S-give-pst
     'Ram gave me a flower'.

Examples in (12)–(15) from Hmar, a Tibeto-Burman language, also show that case marker is not necessarily an element that blocks the agreement between the verb and the subject of the sentence. These examples also present many other intrinsic linguistic features which have either neglected or less explored issue in the literature of linguistics. For example, how can we have an ergative case in example (12) in the above Hmar sentence. The sentence is in present simple tense and we have been told by the fore-runners of theory proponents that the ergative case can only occur with a transitive verb when it is either in the past simple tense or in perfect aspect in any tenses, and not otherwise. The example in (12) in Hmar and in languages like, Mizo, Liangmai, Ao, Thados¬kuki, Khortha and many other Indian languages do not have to obey this rule of tense and aspect governed rule of ergativity. They mark the subject to a transitive verb in all tenses and aspects as Dixon (1971) outlines the criteria and requirements for ergative case marking. It is, therefore, very important that we 'revisit the notions of ergativity and agreement' in Indian languages and give a new direction of research guidelines to the new generation of researcher.

References
Baker, Mark C. 2013. On agreement and its relationship to case: Some generative ideas and results. *Lingua* 130, 14–32.
Dixon, R.M.W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
Subbarao, K.V. (2001) Agreement in South Asian Languages: Minimalist Inquiries: The Framework, in Bhaskararao and Subbarao (2001) *The year book of South Asian Languages*. London: Sage Publication

[78]   *Morpho-syntactic Case changes in Middle Marathi: a Pilot study for an interdisciplinary research in Historical Linguistics* ― Prachi Khandekar, University of Delhi, India

The history of Marathi evolution during the Middle Ages (1350-1800) is turbulent to say the least; there is language contact, shifting language loyalties due to change in the seat of political power, sociolinguistic attitudes, class struggle in the form of *Bhakti Movement* and the overthrow of the Sanskrit hegemony, recreation of a Sanskrit like decorated Marathi while the vernacular Marathi was flowing and evolving unaware, organically. Under all these layers of socio political scenarios, my work aims at investigating Marathi as it was spoken in the street during the Middle Ages. For this, I will be implementing the traditional understanding of historical linguistics to Middle Marathi Data and then process it using modern day state-of-the-art data programming and visualization techniques. In the current day and time, it is essential that technology be used to achieve more sophisticated systems of historical analysis together with applying knowledge from the traditional methods.

My research is aimed at investigating case changes in Middle Marathi by looking at morpho-syntactic case markers that cause the resultant syntax of Modern Marathi as it is today (with a focus on Ergativity). For the pilot study, *Mahanubhav* documents from this period have been scanned and processed by Marathi OCRs that have recently become available. This has enabled the current researcher to instantaneously scan a huge number of historical documents and prepare them for extraction using computational methods of data processing, a procedure that was earlier difficult and more time consuming using manual scanning.

In this paper, I present a preliminary set of results from the Pilot study of two *Mahanubhav* documents; I focus on Accusative case marking endings in Middle Marathi and explore how an algorithm can be designed to extract words bearing the Accusative case markers from a huge pool of data. This algorithm will serve as

a guideline to programmers at a later stage in this research. Following the fate of Accusative markers will help us understand the manifestation of Ergativity in Middle Marathi.

This work lies at the intersection of Historical Sociolinguistics, language change in New Indo-Aryan, medieval and colonial studies as well as computational approaches to treating data in Historical Linguistics. It is exciting to imagine the future of studies in Indo-Aryan linguistics that would result from such interdisciplinary studies.

References
Bloch, Jules (1970). *The Formation of the Marathi Language*. New Delhi: Motilal Banarsidass.
Burridge, Kate. & Bergs, Alexander. & EBSCOhost. (2017). *Understanding language change*. Milton Park, Abingdon, Oxon ; New York,: Routledge.
Chatterjee, Suniti Kumar. (1926). *Origin and Development of Bengali Language*, Calcutta: Calcutta University Press.
Deo, Ashwini. 2006. Tense and aspect in Indo-Aryan languages: Variation and diachrony. PhD thesis, Stanford University.
Deo, Ashwini. (2015). Diachronic Semantics. Annual Review of Linguistics. 1. 179-197. 10.1146/annurev-linguist-030514-125100.
Deshpande, Madhav (1979). *Sociolinguistic Attitudes in India: An Historical Reconstruction*. Ann Arbor: Karoma Publications.
Downey, A. B. (2015). *Think Python*. Beijing: O'Reilly.
Emeneau, M. (1956). India as a Lingustic Area. *Language, 32*(1), 3-16. doi:10.2307/410649
Kasicheyanula Taraka Rama. 2009. *Computational methods for historical linguistics:* IIIT Hyderabad.
Masica, Colin P. (1976). *Defining a linguistic area: South Asia*. Chicago: University of Chicago Press
Naregal, Veena. 2001. *Language Politics, Elites, and the Public Sphere; Western India Under Colonialism*. New Delhi: Permanent Black.
Novetzke, Christian Lee. (2016). *The Quotidian Revolution: Vernacularization, Religion, and the Premodern Public Sphere in India*. New York: Columbia University Press.
Pandharipande V. Rajeshwari. (1997). *Marathi*. (Descriptive Grammars Series.) London: London & New York: Routledge.
Rege, Sharmila. (Mar. 16-22, 2002). *Conceptualising Popular Culture: 'Lavani' and 'Powada' in Maharashtra*. Economic and Political Weekly, Vol. 37, No. 11, pp. 1038-1047
Ringe, Don and Eska Joseph F. (2013). *Historical Linguistics: Toward a Twenty-First Century Reintegration*: Cambridge University Press.
Singleton, R., & Straits, B. C. (2010). *Approaches to social research*. New York: Oxford University Press. Chapter 12, pp.357-392.
Steiner Lydia, Stadler Peter F., Cysouw Michael. (2010). *A Pipeline for Computational Historical Linguistics.*
Trask, R. L. (2007). *Trask's Historical Linguistics*. 2nd ed., revised by Robert McColl Millar. London: Hodder Education.

[79]   *Circumfixation in Punjabi: An OT Analysis* ─Mubashir Iqbal, University of Narowal, Pakistan & Riaz Ahmed Mangrio, University of Gujrat, Pakistan

This paper documents the morpho-phonological functions of Punjabi circumfixes. Through circumfixation, one part of the affix is attached to the beginning and other is to the end of the root (Carstairs-McCarthy, 2002), e.g. *ra(h)* 'path' → ***tʃo-****ra****-ja*** 'the point where four roads start/meat'. These parts should not be considered as prefixes and suffixes; following examples help illustrate this phenomenon:

1 a. *qə.bər* 'grave'   (N) →   ***mʌ-****q.bə.r****-a*** 'tomb' (N)
  b. *kəm* 'work'   (V/N) →   ***nə.-****kəm.m****-a*** 'incompetent person' (A)

In both examples, both parts of the affix: *mʌ- -a* and *nə- -a* function together and are circumfixes; they cannot work in isolation. If we attach them to the root separately, the derived word becomes ungrammatical as is shown below in 2:

2 a. *qə.bər* 'grave' (N)　　→　*mʌ-qbər* / *qbər-a*
　 b. *kəm* 'work' (V/N)　　→　*nə-kəm* / *kəmm-a*

Illustration through 1 and 2 help label them as circumfixes, not prefixes and suffixes. Thus far no other language has been documented showing circumfixation. Therefore, this is a unique study of its kind.

The circumfixes cannot be attached until phonological constraints support them; that means the derived word is totally re-syllabified after the attachment of circumfixes. For instance, in *qə.bər* → *mʌ-q.bə.r-a*, /q/ is the onset in the root but becomes the coda of the first part of circumfix in the output: *mʌ-q*, and the nucleus in *qə* disappears; similarly, the coda in *bər* becomes the onset of the last part of circumfix: *.r-a*. Therefore, the morphology of circumfixes cannot be explained without elaborating the phonological constraints taking place.

Optimality Theory (OT) given by (McCarthy & Prince 1993a, 1993b; Prince & Smolensky 1993) is used to analyze the data. Following tableau provides an insight to OT analysis:

OT Analysis of nə- -a				
Input: *gəl* 'talk'		ALIGN (Cir: nə- -a)	Coda-Gemination	IDENT-IO
a.	gəl	*!	*!	
b.	nə-gəl	*!	*!	*!
c.	gəll-a	*!		*!
d.	→ nə-gəll-a			*!

Candidates (a), (b) and (c) do not take the circumfix, which is why, they are not optimal candidates. In (b) and (c), the prefix and the suffix are attached to the root respectively, however, language does not have any such words, therefore the output can only be achieved when a circumfix is attached, as is in the case of (d). Therefore, from (b), (c) and (d), it is learnt the affix is a circumfix.

Seventeen circumfixes have been found in the language, some of them are very productive, and some are less frequent. Most of the circumfixes derive adjectives from other categories; neverthless, some are also regular in deriving nouns. OT analyses proposes alignment constraints are crucial constraints, while faithfulness constraints are violable ones.

References
Bauer, L. (2003). *Introducing linguistic morphology*. Washington D.C: Georgetown University Press
Booij, G. (2012). *The grammar of words: An introduction to linguistic morphology.* Oxford University Press.
Hardie, A. (2004). *The Computational Analysis of Morphosyntactic Categories in Urdu* (Doctoral dissertation).
Carstairs-McCarthy, A. (2002). *An Introduction to English Morphology: Words and Their Structure.* Edinburgh: Edinburgh University Press

McCarthy, J. J., & Prince, A. (1993a). Generalized alignment. In G. Booij & J. van Marle (Eds.), *Yearbook of Morphology 1993* (pp. 79-153). Doedrecht: Kluwer.

Prince, A. & Smolensky, P. (1993). *Optimality Theory: Constraint interaction in generative grammar*: Wiley Online Library.

[80] *Expectations in the Online Processing of Correlatives in Hindi-Urdu* ― Rajesh Bhatt, University of Massachusetts, USA, Brian Dillon, University of Massachusetts, Amherst, USA, Dave Kush, NTNU, Trondheim, Norway

The incremental processing of filler-gap constructions such as relative clauses has been shown to recruit predictive mechanisms. As soon as comprehenders encounter the head of a relative clause (i.e. the filler), they can predict a corresponding gap later in the sentence. The exact position of the gap is often uncertain, but much work suggests that parsers generate expectations about likely positions for the gap site (e.g., Staub 2010). Studies suggest that there is a strong bias to expect gaps in *subject* position cross- linguistically (Mak et al. 2002; Kush & Eik 2018; Wagers et al. 2018), but that syntactic, lexical, and morphological properties of the filler may lead to different expectations. For example, it has been argued that the animacy of the filler can modulate the preference for subject gaps (Mak et al. 2002; Traxler et al. 2005).

Most work on predictive expectations in long-distance dependency parsing has focused on relative clause or wh-question constructions. In our work we wished to document expectations in a different kind of long-distance dependency where prediction is also possible, in order to see whether there were parallels to previous findings. To this end we investigated incremental expectations for *correlative* constructions in Hindi (CCHs).

CCHs are composed of a *correlative clause* and an associated matrix clause (Bhatt 2002). The correlative clause contains a relative pronoun (RelP, *jo/jisko* in 1) that may appear in a variety of grammatical roles. The RelP is associated with a corresponding demonstrative in the matrix clause (*vo/usko*), which may also appear in different roles.

(1) a. *jo aadmi kaam kartaa hai, usko paisa milegaa.*
 b. *jisko mai ne dekhaa hai, vo kela khaa rahaa thaa.*

CCHs are filler-gap constructions like RCs since the RelP must be linked to a gap inside the correlative clause. Unlike RCs, RelPs in CCs must also be linked to another item: the demonstrative in the matrix clause. In two sentence completion experiments we looked at expectations about the distribution of the upcoming matrix demonstrative. Specifically, we investigated expectations about the *role, case-marking,* and *linear position* of the demonstrative and what factors modulate those expectations.

Experiment 1 (N=25) tested expectations generated by *animate* RelPs. We manipulated whether the RelP was the subject (2a) or object in the correlative clause. If the RelP was an object, we also manipulated whether the RelP was fronted (2b), or in-situ (2c).

(2) a. *jis-ne aadmiyon-ko dekhaa, …*
 b. *jisko aadmiyon-ne dekhaa, …*
 c. *aadmiyon-ne jis-ko dekhaa, …*

We observed an overwhelming preference for subject continuations across conditions (average percentage subject completion: 0.91), seemingly independent of RelP role or linear position ($z < 1$). The majority of

126

subject completions involved *nominative* subjects (0.88; 0.07 = ergative, 0.05 = dative). Demonstratives always occupied clause initial position, irrespective of case or role. The last two facts indicate that participants did not simply expect parallelism between the case marking or position of the RelP and the demonstrative.

Experiment 2 (data collection ongoing) tested expectations with *inanimate* RelPs. We manipulated case marking and the linear position of an inanimate RelP in a 2x2 design, illustrated below:

(2) a. *naukaron ne jo muurtii mez par rakhii thii …*
    b. *jo muurtii naukaron ne mez par rakhii thii …*
    c. *naukaron ne jis muurtii ko mez par rakhii thii …*
    b. *jis muurtii ko naukaron ne mez par rakhii thii …*

If animacy of the RelP modulates expectations similar to the animacy of an RC head, we expect to find fewer subject completions in Experiment 2 than in (1): demonstratives are more likely to be internal arguments of the matrix predicate.

Finally, one question that often arises in investigations of expectations in filler-gap processing is how closely participant expectations track their experience with the language. Do participants predict subject continuations because they are more common in the input? In order to check this possibility we intend to perform a corpus search that quantifies the probability of different matrix continuations as a function of preceding correlative clause.

References
Bhatt, R. (2003). Locality in correlatives. *Natural Language & Linguistic Theory*, *21*(3), 485-541.
Kush, D. & Eik, R. (2018). Animacy-driven expectations in Norwegian Relative Clause processing. Poster presented at CUNY 2018.
Mak, W. M., Vonk, W., & Schriefers, H. (2002). The influence of animacy on relative clause processing. *Journal of memory and language*, *47*(1), 50-68.
Staub, A. (2010). Eye movements and processing difficulty in object relative clauses. *Cognition*, *116*(1), 71-86.
Traxler, M. J., Williams, R. S., Blozis, S. A., & Morris, R. K. (2005). Working memory, animacy, and verb class in the processing of relative clauses. *Journal of Memory and Language*, *53*(2), 204-224.
Wagers, M. W., Borja, M. F., & Chung, S. (2018). Grammatical licensing and relative clause parsing in a flexible word-order language. *Cognition*, *178*, 207-221.

[81]   *Reduplication in Adi (Pa:dam)* ― Rebecca Borang, Jawaharlal Nehru University, India

Adi (Pa:dam) is second major tribe in the state of Arunachal Pradesh, India. The approximate population of Adi (Pa:dam) is around two lakhs. Reduplication is one of the important word formation processes in Adi (Pa:dam).

Reduplication is the process of repeating or duplicating either a full word or just the part of a word. The importance lies not just in the duplication of a word or part of it, but in the semantics of the duplicated part which cannot be expressed merely with the non-duplicated word. Therefore, reduplication represents semantic attenuation, emphasis etc. which are not possible to be expressed in simple non-reduplicated words.

The paper will present the Phonological, Morphological and Semantic constructions of the Lexical reduplication including echo word, complete reduplication, partial reduplication etc.

The process of reduplication is very prominent in languages of Tibeto-Burman languages and this paper is an attempt to explore its extensiveness in the language concerned. The prominence of this process in Adi (Pa:dam) can be hinted through the examples below:

In *echo formation*, Adi (Pa:dam) data shows three active *replacers* /**s/, /r/,** and /**j**/ which is quite unusual (replacers are usually not more than two in a language). Example:

Replacer /s/ in first syllable:
   a.   mura sura   'Bamboo stool etc.'
   b.   ajaŋ sajaŋ   'Love etc.'
Replacer /r/ in second syllable:
   a.   ɲokkam ɲokram   'Nose booger etc.'
   b.   ukkam ukram   'Scorch etc.'
Replacer /j/ in second syllable
   a.   dɨrtuŋ dɨrjuŋ   'Half broken etc.'
   b.   rupuk rujuk   'Ear wax'
There are also echo words which are formed without any replacers.

Also, it is interesting to note that ***Partial reduplication*** is actively used for kinship terminology as shown in example below:

Word   Partial Reduplication
pa:tə 'Eldest fraternal uncle'   tə:tə 'Eldest maternal uncle'

Likewise, in this language, maternal kinship terminologies are partial reduplications of fraternal kinship terminologies. Altogether, reduplication data in Adi Pa:dam enriches the richness of reduplication process in Tibeto-Burman languages.

References
Abbi, Anvita. (1990). *Reduplication in Tibeto-Burman Languages in South Asia*. South East Asian studies, Tokyo.
Abbi, Anvita (1991). *Reduplication in South Asian languages: an areal, typological and historical study*. New Delhi: Allied Publishers Limited.
Inkelas, Sharon and Zoll, Cheryl (2005).*Reduplication Doubling in Morphology*. Cambridge University Press.
Rudolf P. Botha (1988). *Form and Meaning in Word Formation: A Study of Afrikaans Reduplication*. Press Syndicate of the University of Cambridge.

[82]   *Creating VerbFrame Repository for the verbs of change of possession in Hindi* ─ Shivam Dwivedi, IIT BHU & Sanjukta Ghosh, IIT BHU

Depth and accuracy of linguistic analysis decide the course of successful application of linguistic tools. When it comes to Indian languages, morphological analysis plays a crucial role, as most of the information is encoded at this level only (Akshar Bharati, Vineet Chaitanya, Rajeev Sangal and K. V. Ramakrishnamacharyulu 1995). Verb is the most crucial category in parts of speech. Relation of a verb with other constituents of the sentences can be encoded in various manners, and notoriously enough, the same verb can act differently in different environments. Some of such features are discussed below (a-c):

(a) Transitivity alternation
An intransitive verb can become transitive and vice versa in the process of passivization and causativization. Following examples (1-3) illustrate the same:

1. *rohana   nahātā hai.*
   Rohana   bathe(+Present +Indefinite)
   Rohan baths.
2. *rohana bacce ko   nahalātā hai.*
   Rohan   child   PP   bathe(+Present +First Causal)
   Rohan bathes a child.

3. *rohana sohana se   bacce ko   nahalavātā hai.*
   Rohan Sohan PP child PP bathe(+Present +Second Causal)
   Rohan caused Sohan to bathe a child.

(b) Diathesis alternation
Depending on the context, the number of arguments can decrease or increase. Following examples (1-2) show a change in the number of arguments:
1. *śaśāṃka   ko   kitāba milī.*
   Shashanka pp   book get(+Past +Indefinite)
   Shashanka got a book.

2. *śaśāṃka   ko rohana se   kitāba milī.*
   Shashanka PP Rohan   PP book   get(+Past +Indefinite)
   Shashanka got a book from Rohan.

(c) Multiple senses
A verb, just like the words of other POS categories can have multiple senses in different contexts. Check the following examples (1-2):
1. *rajata ghara ātā hai.*
   Rajat   Home   come(+Present +Indefinite)
   Rajat comes to home.
2. *rajata ko saṃskṛta   ātī hai.*
   Rajat   PP Sanskrit   know(+present +Indefinite)
   Rajat knows Sanskrit.

Levin in her work on English verb classes suggested that the concept of possession is really complex and it can be cracked by noticing that verbs of change of possession must include concepts such as *'have'*, *'get'*, 'take', 'contribute', 'exchange', 'obtain', 'equip', 'fulfilling', 'future having' and 'give' (Levin 1993). In change of possession verbs that possession is transferred to another entity. *Curānā* (to steal), *uḍānā* (to fly), *khisakānā* (to move away), *sarakānā* (to move away), *lūṭanā* (to rob), *ṭīpanā* (to note down), *cukānā* (to repay), *bharanā* (to fill), *denā* (to give), *lenā* (to take), *sauṃpanā* (to hand over), *bāṃṭanā* (to distribute), *pheṃkanā* (to throw) etc. are some of the Hindi verbs which fall in the category of change of possession verbs. An example of a basic Verb Frame for one of the Hindi change of possession verbs *pheṃkanā* (to throw) is illustrated as below:

1. *rajata   patthara pheṃkatā hai*
   Rajat   stone   throw (+Present, +Indefinite)
   Rajat throws a stone.

Arc Level	Necessity	Vibhakti	LexicalType	SrcPos
K1	M	Ø	N	L
K2	M	Ø	N	L

Since the last two decades, VerbFrames have been playing a major role in the linguistic analysis. Especially for the Indian languages, they serve the purpose perfectly by bridging the gap between morphological and syntactic levels. Used jointly with Paninian dependency grammar framework, Verb Frames can be very helpful in linguistic analysis and generation (Rafiya Begum, Samar Husain, Lakshmi Bai and Dipti Misra Sharma 2008), (Ghosh 2014).

The aim of this paper is to explore verb frames for the change of possession verbs and their classification in Hindi especially in terms of arguments' nature as well as their semantic properties. Apart from this, another target is to create valuable resources for Hindi in terms of verb frames that may be helpful for research and NLP applications as well as for pedagogy purpose.

References
1. Akshar Bharati, Vineet Chaitanya, Rajeev Sangal and K. V. Ramakrishnamacharyulu. "Natural language processing: a Paninian perspective". New Delhi: Prentice-Hall of India, 1995.
2. Ghosh, Sanjukta. "Making Verb Frames for Bangla Vector Verbs." 11th International Conference on Natural Language Processing. 2014. 305.
3. Levin, Beth. "English verb classes and alternations: A preliminary investigation." Chicago: University of Chicago Press, 1993.
4. Rafiya Begum, Samar Husain, Lakshmi Bai and Dipti Misra Sharma. "Developing Verb Frames for Hindi." LREC (." In LREC. 2008.), 2008.

List of Abbreviations
Arc Level= Syntacto-semantic category for an argument; K1= Kartā; K2 = Karma; L= Left; Lexical Type= POS category
M= Mandatory; N= Noun; Necessity= Optionality of an argument; PP= Post-position; SrcPos= Position of an argument in correlation with the verb; Vibhakti= Morphological marker; Ø= Null

[83]   *"Concepts First": Building a Stronger Foundation* ― Premlata Vaishnava, University of Chapel Hill, Chapel Hill NC, United States & Bairam Khan, University of Michigan, Ann Arbor, USA

Learning a new language is not an easy task. It is a process, a long process that demands a lot of time and regular practice. Similarly, teaching a foreign language is not an easy task because as language teachers we are always looking for ways to modify our teaching techniques possibly for a better outcome. The question is better than what? Our methodologies, our ideas and, our presentational modes to transfer the knowledge of our language skills, to those who are either partially equipped, barely equipped or not equipped at all with all the tools and techniques required to draw a broad spectrum of a language, are not a satisfactory success. The question is why? What is lacking and what are we doing wrong? Is the flaw in the teacher's approach or the learner's approach? Is there a disconnect between the teacher's teaching and learner's learning? The question becomes more prominent when we talk about the communicative approach and, the focus is, mostly, directed towards speaking practice or "communication". The question now is why just

communication and what do we exactly mean when we say "speaking" or "communication"? Are we only training our learners to be able to communicate or speak? This presentation is a small effort to make a case that we need to work hard on basic grammar rules and terminology as much as we want to work on communication and even more for certain grammar concepts especially in the formative years such as beginner level classes.

We can name our teaching style and approach anything from inclusive learning to theme based, from communicative to technology-based or one of the common approaches, the Traditional Learning approach. The common goal for all foreign language teachers of less commonly taught languages in the U.S., and around the globe, is to teach (and prepare) students to achieve a certain level of proficiency in reading, writing, speaking and listening based on guidelines/standards set for those countries by various institutions (ACTFL in the US for example). To this list of four skills, comprehension, processing, and production are other important skills to add. In this paper, the argument is about the importance of grammar and the concepts at an early stage of learning (first year), which forms a stronger foundation that leads a learner towards a path of not only reading, writing, speaking and listening but also comprehension, process and, production. The author does not claim that this method is the best method because there is no such thing as a "best method," rather I outline how this grammar concepts method helps to build a stronger foundation. At University level classes our main audience is adult learners who are fully accustomed to English phonology as English is the first language to many learners in our classes if not all. When we are teaching these learners a new sound system, it is difficult for their system to catch and retain it, thus repetition and more repetition is needed. Just like the sounds, the syntax is also rooted deeply in memory, and we need to alter that to make room for the new sound system. In English, it is "subject-verb-object" and in Hindi it is "subject-object-verb". Furthermore, some sounds do not exist in English, such as Hindi aspirated and unaspirated sounds Ja and Jha or Ka and Kha. While speaking, a learner might be using Ka instead of Kha, and in the mix of a few words or sentences a listener might also understand the information, however, in writing mistakes are quite visible. The sole focus on communication blocks us from achieving the goal of all four proficiencies: Writing, Speaking, Listening and Reading.   For example: If one says in English, "I eat meet" (I eat meat), it might sound correct while spoken but not in writing. Similarly, "I pija no eat" (I don't eat pizza) brings us to two points, the word order and the spelling. The explanation of a simple grammar rule will allow learners to understand and apply the concept both in communication and writing. This paper, with a wide variety of such examples in the Hindi language, explains that among other things we need to make the foundation stronger by working on grammar, regular repetitions and bringing the "Concepts First" approach forward followed by short, simple and familiar communications.

[84] *Role of certain Particles in Complex Predicates in Maithili* — Anil Thakur, Indian Institute of Technology (BHU) Varanasi, India

Works on complex predicates in some of the Indian languages (Butt 1995, Ghosh 2015, Dasgupta 1977, to name only a few) have shown interesting interplay of syntax and semantics. In particular, the role of certain particle elements in the interpretation (disambiguation) of the complex predicate constructions has been found to be quite interesting (Subbarao 2004, Raina et al 2004). The paper presents examines the role of certain particle elements in the interpretation of complex predicate constructions in Maithili. Maithili complex predicates still remain to be fully studied. Some of the existing works (Singh 1979, Yadav 1996, 2003, Yadav 1998) only provide an initial descriptive account of the complex predicate constructions in Maithili. Drawing upon these works, the present paper studies the complex predicate constructions in Maithili for their complexities in exhibiting multiple argument structures, possibility of multiple semantic interpretations, particularly in the context of presence/absence of certain particle elements and also their subtle role in discourse structuring. In Maithili, in compound verbs, some of the V_1 undergo

morphophonemic change (e.g. *uTh* 'rise/get' –> *uThi jo* '(you) get up', *baag* 'run away' –> *baagi jo* '(you) run away'). *le* 'take', *de* 'give', *aa* 'come', *jaa* 'go' are some of the very frequent V₂ in Maithili (*khaa le* '(you) eat', *da de* '(you) give', etc). *le* 'take' has been described as giving a self-oriented meaning, completive aspectual meaning. In some cases, however, the use of *le* as V₂ is seen to mark 'reluctant acceptance'.

(1) bani   gel   chai   ta   chalu   khaa(ie)   lai   chii.
    cook   went   AUX then   DP   eat (EmpP)   take AUX-I
    'It is already cooked, so let me eat (it) (I would have preferred to wait/not to)'

Another interesting aspect in complex predicates is the distributional restriction of particle elements in these constructions across many Indic languages (Raina, *et al* 2004).

(2) a. o   dekhi lelaa.
        he.H see   take.PST
        'He saw (it).'
   b. o   dekhiye   lelaa.
        he.H   see.EmpP   take.PST
        'He indeed saw (it).'
   c. o   bas dekhi(ye)   letaa,   kichu   karataa nahi.
        he.H   only see(EmpP) take.FUT some   do.FUTnot
        'He will only see, will do nothing (else).'

The paper will examine the role of particles in Maithili (including the emphatic particles) in obtaining differences in the interpretation of the V₂ (e.g. *le*), as in 2b-c.

References
Butt, M. (1995). The Structure of Complex Predicates in Urdu. CSLI.
Dasgupta, Probal (1977). The internal grammar of Bangla compound verbs. *Indian Linguistics* 38:2.68-85.
Ghosh, Sanjukta (2015). *Bangla Complex Predicates: Representation in Generative Lexicon.* Partridge Publishing.
Matsumoto, Yo (1996). *Complex Predicates in Japanese: A syntactic and semantic study of the notion 'word'.* CSLI Publications.
Raina, Achla, Anil Thakur & Kamal Choudhary (2004). Focus Particles in Complex Predicate Structures: Cross linguistic Asymmetries. Presented at the 26th All India Conference of Linguists (AICL-26), 29 Nov – 01 Dec 2004, NEHU, Shillong.
Singh, UN (1979). Some Aspects of Maithili Syntax: A Transformational-Generative   Approach. Unpublished Doctoral Dissertation. University of Delhi.
Subbarao, KV (2004, prepublication draft). The role of particles and clitics in disambiguation. Delhi University.
Thakur, Anil (2016). Complex Predicates in Maithili. One day symposium on typological perspectives on complex predicates in South Asian languages, IIT Kanpur, 27 Feb 2016 IIT Kanpur, India.
Yadav, Ramawatar (2003). Maithili. In George Cardona and Dhanesh Jain (eds) *The Indi- Aryan Languages*. Routledge Language Family Series. Pp: 477-497.
-------- (1996). *A Reference Grammar of Maithili*. (Trends in Linguistics: Documentation 11). Berlin and New York: Mouton de Gruyter.
Yadav, Yogendra (1998). *Issues in Maithili Syntax*. Munchen: Lincom Europa.

[85] *Regional variations in Bhojpuri Language* ─ Indira Priyadarshini, University of Delhi, New Delhi, India.

Bhojpuri is an Indo-Aryan language spoken in north eastern part of India. It is mainly spoken in western Bihar and eastern Uttar Pradesh. Historically written in **Kaithi** script, Bhojpuri has three main varieties – *the standard, the western and the Nagpuria.* It has also a border sub dialect called Madhesi. Southern standard Bhojpuri is spoken in the districts of Shahbad, Saran region, Balia and Ghazipur. Western Bhojpuri is spoken in western districts of Faizabad, Azamgarh, Jaunpur, Benaras, the western half of Ghazipur and south gangetic Mirzapur while Nagpuria is spoken in Chhotanagpur region of the Jharkhand state. The most noticeable feature of southern standard Bhojpuri is the preference of letter **"r"** instead of **"t"** in the conjugation of the auxiliary verb. While northern standard Bhojpuri prefers to say **"bate"** instead of **"bare"** which is preferred by southern speakers. In standard Bhojpuri, the termination of the genitive is **"ke"** with oblique form **"ka"** where as in western dialect it is **"ka"** or **"kai"** and in western form; it is **"ke"** respectively.

The present study deals with the difference between standard variation and regional variation of the areas dealing with Bhojpuri. The data was collected from 10-15 people who speak southern standard Bhojpuri and northern standard Bhojpuri. There are a lot of **variations** between old age speakers and young speakers due to mix of culture in the third main variety which is **Nagpuria.** Young speakers whose parents have migrated from southern part of Bihar tend to mix both; standard Bhojpuri (which is their parent's tongue) and Nagpuria (tongue of the Chhotanagpur region). Young speakers aged 15-20 and old speakers both use the same verb **"kar" DO**, but the latter one prefers different tense, person markers and auxiliary verbs. The younger generation use past tense marker **"la"** which is taken from southern standard Bhojpuri while the older generation prefers the original Nagpuria form **"the"**. This shows that change is in progress. But none of the native speakers of the respective forms have lost its originality as both the dialects have sufficient number of speakers. Data have been collected from 10 -15 speakers from the children of immigrants from Bihar to the Chhotanagpur region.

This paper concludes with the hypothesis that there are variations due to migrations leading to code mixing of Bhojpuri with its dialect Nagpuria which adds to the rich linguistic diversity of the northern regions of the Indian subcontinent.

References
Grierson, G.A. 1903. Linguistic Survey of India. Vol-5 Part 2 Indo-Aryan Family eastern group. Specimens of the Bihari and Oriya Languages.
Western standard Bhojpuri. 2014. Archive toady. Digital library of language relationships.
Arun, Awadheshwar. 1972. Bajjika, Hindi aur Bhojpuri ka tulnatmak adhyayan. [A comparative study of Bajjika, Hindi and Bhojpuri]. Muzaffarpur. Kumud Prakashan.

[86] *Structural Analysis of Echo Words in Bangla: A C-V Skeletal Approach to Echo Reduplication* ─ Kuntala Ghosh Dastidar, University of Calcutta, India

Indian Sub-Continent has been identified as a ''Linguistic area'' and was extensively studied by researchers like Murray Barson Emeneau (1956), Collin Masica (1976) and many other linguists. Indian Sub-Continent comprises languages primarily belonging to Dravidian language family, Indo Aryan language, Tibeto-Burman and Austro-Asiatic language family. These genetically unrelated languages share common traits as a result of their geographical proximity. Echo word formation or Echo Reduplication (ER), one kind of partial reduplication, is one of the important linguistic traits in the languages of India. Echo words are

characteristic of colloquial speech throughout the Indian Sub-Continent. Though these formations are colloquial in nature, South Asian speakers use them extensively, so much so that even Indian English attests these formations, such as Bangla, coffee-ʈoffee "coffee etc", Hindi pen-ven "pen etc.". The semantic function of Echo words is to express the sense of 'generality', or to add the meaning of 'such as/and the like', 'etc.'.

Abbi (1992) has defined Echo Reduplication as one kind of "Lexical Reduplication" in which the base word is followed (in some cases preceded also such as Bangla: altu-pʰaltu "nonsense" 'pʰaltu'is the base and 'altu' is the echo word) by an echo word which is originally the partially reduplicated form of the base word. She (2018) has given five different strategies of which Bangla mainly applies three strategies to form Echo Words. According to Abbi the five different strategies used by different Indian languages are-

First strategy: Replacing the initial phoneme (mostly consonant) of the base word by a specific phoneme that is unique to the particular language.
Second strategy: Initial syllable of the base word gets replaced by an entirely distinct syllable and the remaining part is canonically copied in the formation of the echo word.
Third strategy: Base word is preceded by its echoed counterpart instead of getting followed.
Fourth strategy: Nucleus of the initial syllable of base word is altered by another vowel in order to form the echo word.
Fifth strategy: Forming echo words by expressive morphology.

Bangla follows the first, third and fourth strategies in order to form echo words. First strategy is the most common device to form echo words and Bangla has few words which undergo the third strategy. The fifth strategy is also followed but it is mainly used to form onomatopoeic words in Bangla.

Theoretical Framework:
Alec Marantz (1982) has proposed a theory which provides a formal account in the analysis of different reduplicative processes via Consonantal-Vowel skeletal mapping cross-linguistically. Marantz's theory is basically an extension of John MaCarthy's (1979) analysis of the Arabic verbal system. Marantz(1982:436) has considered reduplication as just like other normal affixation processes and the only difference is that the affixes which get added to the stems in reduplicative processes has either complete or partial phonological resemblance with the stems. He claimed that each reduplicative process can be characterized by C-V skeleton and the aim of his theory was to establish the reduplicating skeleton as a reduplicating morpheme and reduplication as the affixation of these C-V skeleton morphemes to stems.

Examples: (1) Agta   *t a k k i* → *t a k k i*   *t a k k i* = *taktakki* 'legs'
CVC+ CVCCV   C V C + CVCCV   (Marantz 1982:446)
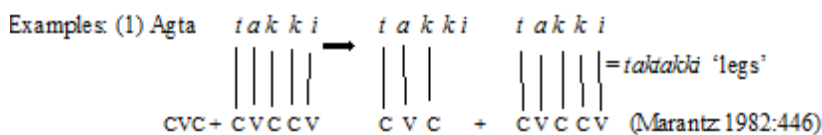
In (1a) Agta reduplication has been presented where CVC reduplicating affix (*tak*) which is prefixed to the stem CVCCV (*takki)* 'leg' resulting in plural form CVCCVCCV (*taktakki)* 'legs'. So, the mechanism that Marantz has proposed is the copying of a stem's entire phonemic melody to the reduplicating affix on the same tier and on the same side to which the affix is added. These reduplicating affixes are dependent on the phonemic melody of the stems which is the only difference between reduplication and other normal affixations. Marantz has proposed four conditions on the linking of phonemic melodies with C-V skeletal which predict the correct association for most reduplicative processes.

Condition A: If not overruled by a special condition, feature complexes containing the feature [-syllabic] and [+Syllabic] should be linked to C slots and V slots in the skeletal tier respectively.

Condition B: Each and every phoneme (both consonant and vowel) in the phonemic melody should be linked to the C and V slots in accordance with other conditions and principles. Once this association is accomplished, extra phonemes and C-V slots are discarded. The linking between phonemes and C-V slots is one-to-one. There is no multiple association between phonemes and C-V slots and vice versa.

Condition C: Some distinctive features may be pre-attached to C-V slots on the skeletal tier. These pre attached features take precedence over any phoneme from phonemic melody tier which may link to these slots.

Condition D: Unmarked rule for the association between the phonemic melody and reduplicating skeleton prefixed to a stem starts with the leftmost phoneme of the melody linking to the leftmost C-V slot on the skeletal tier eligible under Condition A and proceeds from left to right. In case of suffixation the linking of phonemic melody to the reduplicating skeleton starts with the rightmost phoneme of the melody linking to the rightmost C-V slot of the skeleton and proceeds from right to left. According to Marantz this association is "phoneme-driven" (Marantz:1982:447) as for each phoneme involved in the mechanism of linking, the association first scans along the skeleton to find a C-V slot eligible for association with the phoneme in accordance with the condition A.

Objectives of the paper

Abbi has considered Echo Reduplication as one kind of Lexical Reduplication, but we consider it as mere affixation of CV skeleton and this present work adopts Marantz's theory of Reduplication and attempts to analyze Abbis's different strategies that Bangla follows to form Echo Words as the affixation of reduplicating C-V skeleton to a stem where the reduplicating affix relies on the phonemic melody of the stem and the association of phonemes with the C-V slots of skeleton follows these above mentioned four conditions.

A C-V Skeleton Theoretic Account of Bangla Echo Words:

Phonologically Echo Reduplication is one kind of Partial Reduplication as the initial phoneme (vowel or consonant) or syllable gets replaced to form Echo Words. This replacer phoneme phoneme/syllable varies from language to language and in a particular language it is more or less fixed and rigid. In case of Bangla, unvoiced retroflex viz. /ʈ/ is mostly used as replacer phoneme.

Abbi's (2018) first strategy that Bangla Echo Words follow is CVX > CVX-C'VX, as we can see a C'VX is suffixed to a stem CVX, CV is the initial syllable and X is the remaining part of each stem which gets copied along with the nucleus of initial syllable to the echo suffix without any change in its phonological shape whereas the onset of the stem's initial syllable C is replaced with a distinct phoneme C'[/ʈ/ in case of Bangla]. X has been used for an easier representation of Echo Word Formation in Bangla as C-V skeletal structure of this X part depends on the Bangla words encountered the Echo Reduplication.

135
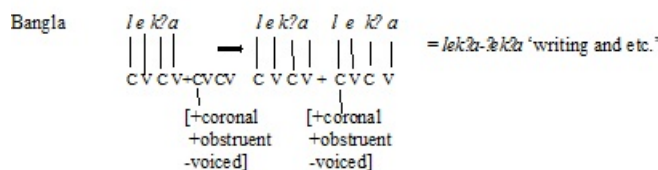
Marantz's Condition C enables the replacement of the stem's onset viz. C as the possibility of some distinctive feature's pre-attachment to the C-V slots has been formally encoded in it.

Now, example (2) Bangla *lekha-Tekha* " writing etc." can be analyzed as suffixation of CVCV [here CVX=CVCV as X=CV] instead of C'VCV, reduplicating suffix associates with its phonemic melodies from right to left and pre-association of a feature complex containing the features [+coronal,+obstruent,-voiced] to the leftmost C slot in this reduplicating suffix's skeleton results in *lekha-Tekha* instead of **lekha-lekha*. Although a consonant from the stem's phonemic melody links to this C slot in the reduplicating suffix in Bangla, but all of its features get overridden by the pre-attached features. I have discussed the first strategy only. Other strategies will be discussed elaborately in the paper.

References
1. Abbi, Anvita. (1992). *Reduplication In South Asian Languages-An Areal, Typological and Historical study*. New Delhi: Allied Publishers.
2. (2018); Echo formations and Expressives in South Asian languages: A probe into significant areal phenomena, in:. Aina Urdze (ed.), *Non-Proto Typical Reduplication: Studia Typologica.* Berlin: Mouton de Guyeter.
3. Chatterji, Suniti Kumar. (1939). *Bhasha prakash Bangala Vyakaron*. Calcutta: Rupa Publishers.
4. Emeneau, M.B.(1956). India as a Linguistic Area, in: *Language* , 32(1), http://www.jstor.org/stable/410649. Retrieved on 10th November, 2016.
5. MacCarthy, John. (1979). *Formal Problems in Semitic Phonology and Morphology,* Doctoral Dissertation ,MIT. Massachusetts: Cambridge.
6. (1981). A Prosodic Theory of Nonconcatenative Morphology, in: *Linguistic inquiry*, 12. Massachusetts: The MIT Press.
7. Marantz, Alec. (1982) Re Reduplication, in: *Linguistic Inquiry*, Vol. 13, No. 3 (Summer, 1982). Massachusetts: The MIT Press, http://www.jstor.org/stable/4178287. Retrieved on 17th April,2017.
8. Tagore, Rabindranath. (1909). *Shabda-tatt*va. Calcutta: Visvabharati.

[87]   *A study on Sentiment Analysis - Discussing the issue of Discourse in Bengali Sentences* ─ Arka Das, Jadavpur University, West Bengal

Sentiment Analysis a system of analyzing the subjective information from a text by designating polarities to lexical items that have a sentimental value. But opinions have their own polarity as whole, regardless of the polarity of content words. A priori sentiment is sometimes changed in a discourse. As such, studying the context of an opinion is necessary. This paper primarily deals with the application of sentiment analysis in Bengali sentences when context is concerned.

na   aj   d͡ʒat͡sc ͪ**ina**
no   today   going+not

What seems here to be sentence carrying a negative emotion may ultimately be positive based on the context. Considering both the speaker and the listener/listeners are both in agreement with *not going today.*

This issue is even more prevalent in case of idioms.

ɖu noukaj pa ɖije t͡sɔla

The sentence roughly translates to, trying to stand with your feet on two boats at the same time. A person who is not aware that it is an idiom may not understand it's intended polarity. Intention plays a big role when judging context.

kal   ʈomake aʃʈe   ɦɔbena
tomorrow you   to come have+not

The speaker here may be giving a day-off to an employee. There are also other factors such as Tense, exclamatory sentences and sarcasm to name a few.

References
[1]   Wilson, Theresa, Janyce Wiebe, and Paul Hoffmann. "Recognizing contextual polarity in phrase-level sentiment analysis." *Proceedings of the conference on human language technology and empirical methods in natural language processing*. Association for Computational Linguistics, 2005.
[2]   Kaur, Amandeep, and Vishal Gupta. "A survey on sentiment analysis and opinion mining techniques." *Journal of Emerging Technologies in Web Intelligence* 5.4 (2013): 367-371.
[3]   Abbasi, Ahmed, Hsinchun Chen, and Arab Salem. "Sentiment analysis in multiple languages: Feature selection for opinion classification in web forums." *ACM Transactions on Information Systems (TOIS)* 26.3 (2008): 12.
[4]   Williams, Lowri, et al. "The role of idioms in sentiment analysis." *Expert Systems with Applications* 42.21 (2015): 7375-7385.
[5]   Pang, Bo, and Lillian Lee. "Opinion mining and sentiment analysis." *Foundations and Trends® in Information Retrieval* 2.1–2 (2008): 1-135.
[6]   Wilson, Theresa, et al. "OpinionFinder: A system for subjectivity analysis." *Proceedings of hlt/emnlp on interactive demonstrations*. Association for Computational Linguistics, 2005.
[7]   Riloff, Ellen, Janyce Wiebe, and William Phillips. "Exploiting subjectivity classification to improve information extraction." *Proceedings of the national conference on artificial intelligence*. Vol. 20. No. 3. Menlo Park, CA; Cambridge, MA; London; AAAI Press; MIT Press; 1999, 2005.

[88]   *Lodha: A Struggle for Existence* — Shuvam Dutta, Jadavpur University, Kolkata, India

Lodha is an Indo-Aryan language (Anderson, Gregory D. S. 2008), spoken in some villages of West Bengal, India. It mainly distributed in the jungle tracts of Midnapur, Kharagpur and Jhargram districts of West Bengal. The Lodhas are marginalized scheduled tribe groups in West Bengal, India. They are called as criminal tribes till the revocation of the Criminal Tribes' Act of 1952. Besides West Bengal, they are also found in the Mayurbhanj and Baleswar districts of Orissa, India. Originally, they live in hilly rugged terrains covered with Jungle (Panda, Santanu & Guha, Abhijit. 2013).

This paper is descriptive and analytical in nature. Interview method is used to collect the primary data. The methods of data collection were mainly based on preliminary surveys, observation, interviews and inquiries in order to obtain the required data. We used a set of questionnaires which include Sentences and words. We also used two set of picture books to collect the words for making dictionary. But we are not only depending on that questionnnaries and picture books are also collecting a lot of narrative data from the speakers. Participant observation method was followed during the field. So we are able to know their social and economic conditions.

This paper has four objectives:
✓ To realize the effect of Dominant language on Lodha.
✓ To discuss the Language attitude of Lodha community.
✓ To observe their economic struggle for better life and how it effects on their language.

✓ To analysis the current state of Lodha language through UNESCO's Language vitality factors.

First, this paper discussed about the effect of the dominant languages. We have collected a lot of words from that community. We thoroughly observed and studied the words. We have seen that Lodha language is heavily influenced by Bangla language. They have their own unique words. But we collected many words, those were borrowed from Bangla. Now let us consider a comparative list of words below:

English	Lodha in IPA	Bangla in IPA
1.Corn	ɟonar	bʰuʈʈa
2.Orange	ɟamir	kɔmla lebu
3.Papaya	pʰipa	pepe
4.Pumpkin	bʰoital	kumro
5.Garlic	rosun	rosun
6.Carrot	gaɟor	gaɟor

Here we take only six words of Vegetables and you see that they borrowed words from Bengali. If we show the whole dictionary made by our SRIELI project team, then you realize not only vegetables, there are a lot of words those are borrowed from Bengali. Now we will present here the some Sentences of Lodha. The word order in Lodha is SOV.

1. **amhi** **etʋa** **coli coli** **mela** **ɟai-tʰ-i**
   I now Walk-redup fair go-AUX-1SG
   'I am going to fair by walk.'
2. **u: kal** **sɔhɔr** **gʰurte** **ge-tʰ-al-e**
   he yesterday city roam go-AUX-PST-3SG
   'He went to roam the city yesterday.'
3. **ɟɔl** **ale** **bʰal** **cas** **hɔ-bek**
   rain come good cultivation be-FUT
   'If it rains then there will be good cultivation.'

Lodha is an Indo-Aryan language (Anderson, Gregory D. S. 2008); speech community is surrounded by users of Bangla and Odia languages which are also belonged to Indo-Aryan language family. So their language is more influenced by these two languages. However some basic features are listed here:

✓The language follows the SOV word order.
✓This language has an agreement in term of Person.
✓The language has Pro-drop feature.
✓Reduplication is occurred in Lodha.

We will provide detailed discussion about more features of Lodha in our paper and will see how Bangla and Odia effect on it. Second, this paper will talk about Language attitude of this community. To grow up their economy now they try to interact with the non-tribal Indo-Aryan population and they try to forget their own language. So we will discuss in detail their language attitude to know the present condition of Lodha. Third, we will discuss the socio-economic condition of Lodha. The socio-economic condition of Lodha community creates a great challenged for them. In above we have mentioned that they are designated as one of the criminal tribes till the revocation of the Criminal Tribes Act of 1952. This claim about them causes disintegration from any other society. They depend on collection of minor forest products, fishing and hunting. Now a days they also work as daily wage laborer, collect medicinal plants and other forest products.

For this reason their economic condition is below poverty line. They have their own houses but there are no other things to use. A lot of people don't have any school education. How this condition creates a barrier against us, we will also discuss this in our paper by exemplified the situation. At last, this paper is to assess the nature and degree of language endangerment of Lodha based on UNESCO's Language Vitality and Endangerment framework.

References

Anderson, Gregory D. S. 2008. The Munda Languages, Routledge Language Family Series.

Ghatak, Proggya. 2013. Stigmatized Identity and Social Exclusion: A Case Study on Lodhas of West Bengal: Social Action (Vol 63).

Panda, Santanu & Guha, Abhijit. Lodhas of West Bengal: A Case Study: The Tribute Tribune (ISSN: 2249-3433).

Panda, Santanu & Guha, Abhijit. 2013. Ground Realities of Development among the Lodhas in West Bengal: Journal of South Asian Anthropologist (ISSN: 0257-7348).

UNESCO Ad Hoc Expert Group on Endangered Languages, 2003. Language Vitality and Endangerment.

* My study and survey depends on field work organized and funded by UGC-SRIELI Project team of Jadavpur University.

[89] *Valence-Changing Devices in Rabha* ― Indira Bishui, Jadavpur University, India

Abstract: Rabha is a Sino-Tibetan language. It is spoken in the banks of Brahmaputra, Goalpara district of Assam and northern slopes of Meghalaya. The data was collected for this research from Madarihaat of Alipur Duar district. My paper focuses on the valence-changing devices in Rabha.

1. Passives:

When the sentence changes from active to passive voice, there appears a "ʔ" passive marker in the end of the verb root, followed by the variations of the root "sai" meaning "to do". There are also unique cases noted.

(a) aŋ   leka   pʌrʌi-ta
     I   book   read-PRS-PROG
     'I am reading a book.'

2. Anti-Passives:

Antipassives are possible voice constructions in ergative-absolutive languages, in which ergative case is in translation equivalent to nominative case and absolutive case, the accusative case in nominative-accusative languages like English or Bangla, and so on. In Rabha, there is no noun-verb agreement. Since it is not an ergative-absolutive language, there is no antipassive voice in it.

3. Unaccusatives and Unergatives:

Rabha has a few unaccusatives, which are intransitive verbs.

(b) umɔr   ci-o
     She   die-PST
     (patient)
     'She died.'

There are unergative verbs in Rabha, which are intransitive verbs, but unlike unaccusatives the external syntactic role of the unergative verbs are semantically agents.

(c) umɔr   jubut-ta
     She   sleep-PRS.PROG
     (agent)
     'She is sleeping.'

5. Noun-Verb Incorporation:

It is a type of word compounding with a verb and a noun. The verb combines with the noun, the direct object to form a new word. In Rabha, the direct object, noun combines with the verb and a "marap" (man) is attached to the end to form a endocentric non-verb incorporation.

(d) bil   sakʃa   bɔcɔtei-sa-marap
     Bill   person-CLF   mango(N)-eat(V)-man(N)
     'Bill is a mango-eater.'

6. Causatives:

In Rabha, there are causative verbs which increase the verb's valency by one.

(e) meri   bɔrɔf-o   gɔ-cəlei-ou
     Mary   ice-ACC   CAUS-melt-PST
     'Mary caused the ice to melt.'

References
1. Abbi, A. [2001]. *A Manual of Linguistics Field Work and Structure of Indian Languages.* LINGCOM. Europe.
2. Subbarao, K.V., Hakachan, U.R., Dutta. M.G. [2016]. *Rabha (Tibeto-Burman) A Typological Grammar.*

[90]   *Verb and Verb morphology of Toto* ─ Nandi Trishita, Jadavpur University, India

This work attempts to investigate Verbs and Verbal morphology incorporated in Toto also the tense and aspectual markers of the language. This work will try to make generalized view of the categories. It is seen that aspectual markers change with respect to the aktionsart of the verbs. Also it is observed that verb roots change with temporal situation in certain cases. Sometimes aspect markers change with person.

Background of the language: Toto is a critically endangered language in India (as per UNESCO report) of the Sino-Tibetan group. It is spoken by the Toto community in Totopara (a small village in the Alipurduar district of West Bengal,India). The language is documented by students of School of Languages and Linguistics, Jadavpur University in 2016.

Chakraborty (2006) states that morphologically Toto Verbs are monosyllabic and mono-morphemic.

1.   Example: Pi- 'pluck' Ku-'be' Pa-'bring'
      Ge-'know' Bui-'fly' Goi-'visit'
Disyllabic mono-morphemic or simple verbs are also found in Toto. But they are very few.

2. Example:d͡ʒɛd͡ʒɛŋ: 'love' Enṭa: 'be good'
The infinitive suffix **'ko'** is added to get the infinitive form.

3.Example: **coi+ko = 'to buy'**
    Buy+ko
'wa' is gerunditive and participial marker.

4.Example**: amalei+wa = 'cooking'** [gerund]
Cook+wa

The Toto verbs like all other general verbs has the tendency of getting inflected to Tense and Aspect.

Data: Watch/look (activity) 'tiŋ/kaŋ'

TABLE:1	Present	Past	Future
Habitual	ka jægö tiŋ - ᶲ -mi I mountain watch- asp-tense 'I watch mountains.'	ka jægö tiŋ -t͡ʃaŋ -mi I mountain watch -asp-tense 'I used to watch mountains.'	ka jægö kaŋ- ᶲ -ro I mountain look-asp-tense 'I will look mountains.'
Progressive	ka jægö tiŋ -diŋ-na I mountain watch-asp-tense 'I am watching mountains.	ka jægö tiŋ -diŋ-mi I mountain watch-asp-tense 'I was watching mountains.'	ka jægö kaŋ - diŋ -ro I mountain look-asp-tense 'I will be looking mountains.'
Perfective	ka jægö tiŋ -ᶲ-na I mountain watch-asp-tense 'I have watched mountains.'	ka jægö tiŋ -ᶲ-mi I mountain watch -asp-tense 'I had watched mountains.'	ka jægö kaŋ- diŋ -ro I mountain look-asp-tense 'I will have looked mountains.'

Data: Love (state) 'd͡ʒɛd͡ʒɛŋ' 1ˢᵗ person.

TABLE:2	Present	Past	Future
Habitual	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-ᶲ-mi I you-case love-asp-tense 'I love you.'	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-diŋ-mi I you-case love-asp-tense 'I used to love you.'	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-ᶲ-ro I you-case love-asp-tense 'I will love you.'
Progressive	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-diŋ-na I you-case love-asp-tense 'I am loving you.'	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-diŋ-mi I you-case love-asp-tense 'I was loving you.'	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-pad͡ʒɔ-ro I you-case love-asp-tense 'I will be loving you.'
Perfective	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-ᶲ-na I you-case love-asp-tense 'I have loved you.'	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-ᶲ-mi I you-case love-asp-tense 'I had loved you.'	ka naṭi-hiŋ d͡ʒɛd͡ʒɛŋ-pad͡ʒɔ-ro I you-case love-asp-tense 'I will have loved you.'

Data: 2ⁿᵈ and 3ʳᵈ person.

TABLE:3	Present	Past	Future
Habitual	naṭi/ako d͡ʒɛd͡ʒɛŋ-ɸ-mi you/he love- asp-tense 'You/he love/loves.'	naṭi/ako d͡ʒɛd͡ʒɛŋ-diŋ-mi you/he love- asp-tense 'You/he used to love.'	naṭi/ako d͡ʒɛd͡ʒɛŋ-ɸ-ro you/he love-asp-tense 'You/he will love.'
Progressive	naṭi/ako d͡ʒɛd͡ʒɛŋ-diŋ-na you/he love-asp-tense 'You/he are/is loving.'	naṭi/ako d͡ʒɛd͡ʒɛŋ-diŋ-mi you/he love-asp-tense 'You/he were/was loving.'	naṭi/ako d͡ʒɛd͡ʒɛŋ-diŋ-ro you/he love-asp-tense 'You/he will be loving.'
Perfective	naṭi/ako d͡ʒɛd͡ʒɛŋ-ɸ-na you/he love-asp-tense 'You/he have loved.'	naṭi/ako d͡ʒɛd͡ʒɛŋ-ɸ-mi you/he love-asp-tense 'You/he had loved.'	naṭi/ako d͡ʒɛd͡ʒɛŋ-diŋ-ro you/he love-asp-tense 'You/he will have loved.'

Analysis: **'mi'** is the past tense and habitual present marker, **'na'** is the present tense marker and **'ro'** is future tense marker. Habitual aspect markers are **t͡ʃaŋ, diŋ, and di** and sometimes are absent. Progressive aspect markers are **diŋ, pad͡ʒo, de, di and ᶲ**. Perfective aspect markers are **pṭe, diŋ, punde, di and ᶲ.** The **verb root** 'watch' changes to 'look' in future tense keeping the inflectional markers same. For **state verb 'love'** the 1ˢᵗ person the inflectional markers of aspects are different from that of 2ⁿᵈ and 3ʳᵈ person. *(Further data will be given during the presentation)*

References

Abbi, Anvita. *A manual of linguistic field work and structure of Indian Languages*. 2001.

Chakraborty, A K. Phonological morphological and syntactic study of the Toto language in the light of Bengali and English linguistic analysis. 2006.

Perumalsamy, P. "Toto." 2011.

Saeed, John I. *Semantics*. 1997.

Singh, Chungkham Yashawanta. "Tense and Aspect in Kuki-chin." Linguistics of the Tibeto-Burman Area. 1999.

[91]   *Light Verbs in Diachrony: Evidence from Marathi* ― Aaditya Kulkarni, Deccan College, Pune, India.

The diachronic nature of light verbs in the Indo-Aryan languages has been a matter of debate. Scholars like Hook (1991, 1993) and Slade (2013) consider light verbs to have emerged as the resultant of diachronic change; whereas Butt and Lahiri (2013) opine that light verbs are historically stable and resistant to change. In the light of these views, the present paper traces the Marathi light verbs across time and tries to show that their pattern is indicative of gradual emergence rather than historical stability.

A light (or vector) verb is a semi-lexical verb which is bleached of its lexical meaning, but adds semantic nuances to the meaning expressed by the main (or polar) verb when it occurs in a compound verb construction (as illustrated by 'ṭakṇe' in 1).

1.   *mi pəṭrə lih-un ṭak-l-e*
     1.SG letter.N write-CP drop-PRF-N
     I wrote the letter (lit. got rid of the task/responsibility of writing it).

Light verbs were believed to be absent in old Indo-Aryan, and were considered to have developed during the middle Indo-Aryan period to compensate for the loss of root modifying affixes (Beams, 1879). Taking

this forward, Hook (1991, 1993) proposed that the development of light verbs in the Indo-Aryan languages is a case of 'aspectogenesis' (emergence of aspectual contrast). He showed that the difference between a Hindi compound verb and its corresponding simple verb construction (*kərna* vs. *kər dena*) is mainly aspectual, and the usage of light verb gives a perfective reading as opposed to its simple verb counterpart. In stark contrast to this, Butt and Lahiri (2013) claim that light verbs have always been present in Indo-Aryan languages and propose a single underlying lexical entry for a light verb and its homophonous simple verb in order to account for their (co-)existence since the old Indo-Aryan stage. They also claim that light verbs are inert to any kind of change and hence, depart from the prevalent view that auxiliaries develop from further grammaticalization of light verbs
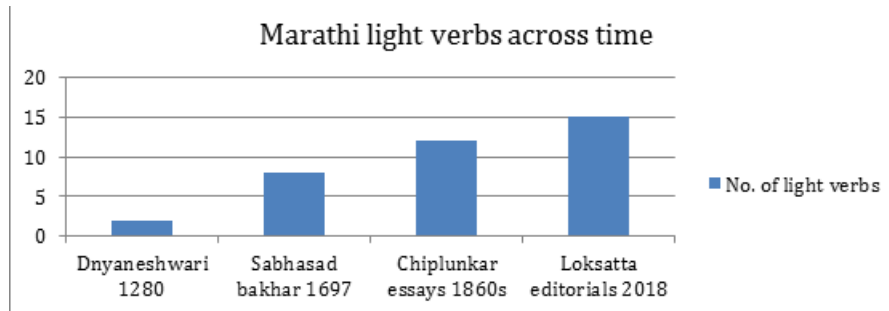
Figure 1: Marathi Light verbs across time

Now, the existence of light verbs since old Indo-Aryan stage and their stable nature would imply that the number of light verbs present in different time periods of a language should roughly be the same (or at least, shouldn't be vastly different). A pilot study of around a thousand sentence corpus of the following texts from different time periods of Marathi shows otherwise:

As it can be seen from figure 1, no. of light verbs present in the late 13th century Marathi text *Dnyaneshwari* (two) is significantly less than the no. of light verbs present in the contemporary Marathi (fifteen- as illustrated by *Loksatta* editorials). This necessitates a closer inspection of the data from Indo-Aryan languages in order to arrive at a better understanding of the diachronic nature of light verbs.

By analyzing a thousand sentence corpus of various Marathi texts from different time periods ranging from 13th century C.E. to contemporary Marathi, the present paper will firstly try to show that not all light verbs occur in all stages of Marathi, and there is a systematicity in the order of their emergence.

Secondly, with the help of frequency patterns of the selected light verbs ($\widehat{dz}aŋe$ (to go), $g^heŋe$ (to take), and *ʈakŋe* (to throw); selected based on their order of emergence and synchronic frequency), it will try to show that light verbs have undergone changes in terms of their productivity and frequency of occurrence.

Lastly, with the help of the data showing the evidence of obligatorification of the usage of light verbs to mark perfectivity, it will be argued that Marathi shows the tendencies of aspectogenesis in case of the aforementioned light verbs.

Thus, with the help of diachronic data from Marathi, the present study will attempt to trace the development of Marathi light verbs, and will examine the implications of this evidence for our present day understanding of Indo-Aryan light verbs.

References

Beams, John. 1879. *Comparative Grammar of the Modern Aryan Languages of India, vol. III*. London: *Trübner* and Co.

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. In *Approaches to Grammaticalization II*, ed. Traugott, Elizabeth Cross and Heine, Bernd. 59-89. Amsterdam: John Benjamins,

Hook, Peter Edwin. 1993. Aspectogenesis and Compound Verb in Indo-Aryan. In *Complex Predicates in South Asian Languages,* ed. Verma, Mahindra. 97-113. New Delhi: Manohar Publishers and Distributors.

Slade, Benjamin. 2013. The diachrony of light and auxiliary verbs in Indo-Aryan. In *Diachronica*. 30.4: 531–578.

[92]   *Structural Changes as a result of Dialect Contact* — Ranjan Kumar, University of Delhi, India

It is commonly believed that that "morph-syntactic structures are faithfully transmitted across generations, and are not transferred from language to language in normal linguistic development" (Labov 2007). The present paper focuses on two morpho-syntactic changes that Bajjika [traditionally considered as a dialect of Maithili] is undergoing due to dialect contact with Bhojpuri, a western Bihari Language. Bajjika is a minority language spoken in the north-western districts of **Vaishali, Muzaffarpur**, **Sitamarhi**, **Samastipur**, **Sheohar**, **West Champaran** and **East Champaran** which are together called **Bajjikanchal** in Bihar state of India by around 15 million people and the adjacent areas in Nepal. This language region begins with the border of Hajipur, 20 kilometers north of Patna (the capital city of Bihar) across the Ganges. The Bajjika speech community is surrounded by four other speech communities: Maithili in the east, Magahi in the south, Angika in the southeastern side, and Bhojpuri in the west. The Gandak River on the western edge of Bajjikanchal flows into the Ganges on the southern border of Bajjikanchal. That river thus functions as a line of demarcation between the Bhojpuri and Bajjika speech communities. In the south, the Ganges separates Bajjikanchal from the Magahi speech community (Kashyap, 2014).

The present study deals with two sociolinguistic syntactic variables which Bajjika has adopted from Bhojpuri due to language contact: the adoption of a present tense marker –**la** and the adoption of the auxiliary **hawe/hai**. Earlier Bajjika had null present tense marker which it still has in the speech of older generation and children. Mainly the adult population is favouring the newer form –**la** marking present tense as in '*ham toh-raa dekh-i-la* 'I see you. The auxiliary verb 'chh' is also being replaced by **hawe/hai** 'be' in the speech of the adults. These are typical Bhojpuri forms which have travelled to Bajjika by diffusion and excessive language contact. (Grierson 1902). Interestingly there is a conflict between Maithili (closely associated with the Brahmin castes in Bihar) speakers and Bajjika speakers as Maithili have been considered as Brahmin's Dialect and Bajjika as Non-Brahmin's dialect. This is one of the reasons why Bajjika is looking towards Bhojpuri for all types of borrowing lexical, structural and so on. Bhojpuri is the language associated with war loving people of Bihar (Grierson 1903).And it is hypothesized that the Bajjika speakers use the Bhojpuri auxiliary **ha/hawe** instead of Maithili **chh** to distance themselves from and as a reaction to the Maithili speakers.

This paper follows the **Qualitative** method and is based on data collected from 10 speakers based on four age groups: Three old speakers [aged 60-70] three middle aged speakers [40-60] two adult speakers [18-35] and two younger speakers [14-18]. The important finding is that the old aged speakers and the middle aged speakers form homogeneity and use the typical Bajjika null past tense marker and the Auxiliary verb **chh** '**be**'. The adolescents have adopted some innovative forms and are using them at 20-22 percent in their speech. On the other hand the adult speakers are using the new Bhojpuri forms at 70 percent, in accordance with Labov (2007) that "diffusion are the result of the fact that most language contact is largely between

and among adults" and that is the reason why the present innovation is typically the characteristic of adults' speech.

References

1. Grierson, George Abraham. 1903. Linguistic survey of India, Vol. V. Indo-Aryan family, eastern group, Part II: *Specimens of the Bihari and Oriya languages*. Calcutta: Office of the Superintendent of Government Printing. Reprinted in 1968 by Delhi: Motilal Banarsidass.
2. Kashyap, Abhishek Kumar. 2012. *The pragmatic principles of agreement in Bajjika verbs*. Journal of Pragmatics 44(13): 1668–1687.
3. **Kashyap, Abhishek Kumar.2014. *The Bajjika language and speech community*. International Journal of the Sociology of Language · May 2014.**
4. **Labov, William.2007. *Transmission and Diffusion. Language* 83, June 2007**
5. Arun, Awadheshwar.1972.*Bajjikā, Hindi aor Bhojpuri kā tulnātmak adhyayan* [A **comparative study of Bajjika, Hindi and Bhojpuri]. Muzaffarpur: Kumud Prakashan**

[93]   *On 17th century strategies for explaining by means of Portuguese glosses the use of vector verbs in Early Modern Tamil, as seen in Antam de Proença's posthumous /Vocabulario Tamulico com a Significaçam Portugueza/ (1679).* ― Jean-Luc Chevillard, Université de Paris Diderot, Paris

Between 1972 and 1977, a ground-breaking series of seven articles (totalling 122 pages) which were an in-depth examination of "The Tamil Aspectual System" by Harold F. Schiffman appeared in successive issues of the /Journal of Tamil Studies/ (jts 02-06, 09 & 11). In that series of articles, Schiffman examined in detail the use of several of those items which have been variously referred to in subsequent literature (See articles by Steever,E. Annamalai, Hook, Pardeshi and others) and which I shall refer to here as "Vector Verbs" (following Hook and Pardeshi[2006], "Are Vector Verbs eternal?"). The present study is one of the by-products of a wider ranging project, in which I have been engaged for several years, which consists in preparing an electronic edition of Antam de Proença's posthumous /Vocabulario Tamulico com a Significaçam Portugueza/ (1679). That /Vocabulario/ is a non-lemmatized pre-dictionary and contains 16209 entries on 508 pages printed in 2 columns. Based on the currently entered data, which covers 35.5% of the text, it can be estimated that the /Vocabulario/ contains more than 3300 main citation forms for "verbs", the citation form chosen being normally the one ending in -KIṞATU (or -KKIṞATU, or -ṞATU, ...), as in VAṆAṄKIṞATU "Adorar, reuerenciar, ..." (item 410_R_n), whereas the 20th cent. Madras Tamil Lexicon prefers to use the verbal noun VAṆAṄKUTAL ("To bend, To be submissive, To worship") as a citation form. However, not all the 3300 citation forms for "verbs" correspond to simple verbs because the /*Vocabulario/* lists as separate entries ca. 600 causative verbs (such as VAṆAṄKIVIKKIṞATU "Fazer adorar", item 410_R_m), although the much more copious Madras Tamil Lexicon does not devote separate entries to such items. Interestingly, the 1679 /Vocabulario/ also enumerates as separate entries more than 140 compound verbal forms, where the "converb" of a "simple full verb" is combined with a "Vector Verb" (or an "aspect marker", if we use Schiffman's early terminology). Inside those 140 "compound verbal" entries, seven distinct "vector verbs" are represented (as per my current estimation), which are, in decreasing frequency: PŌṞATU, PŌṬUKIṞATU, IRUKKIṞATU, KOḶḶUKIṞATU, VAIKKIṞATU, ARUḶUKIṞATU and VARUKIṞATU. As an example PŌṞATU is seen inside item AḶIÑCU PŌṞATU ("corrūperse", item 12_R_k), IḶAICCUP PŌṞATU ("Emagrecer", item 83_R_a) and many other such items. These seven "vector verbs" clearly correspond to those "aspect marker" which Schiffman [1972-1977] identifies as /pō/, /pōṭu/, /iru/, /koḷ/, /vai/, /aruḷ/ and /vā/. Interestingly, the first half of entry 299_L_o explains the use of KOḶḶUKIṞATU as a "full verb" whereas the second half of the entry explains its use as a "vector verb". It seems important that the whole of that early data collection, which predates the rise of Latin, and later (especially nowadays) of English, as the dominant scientific Lingua Franca, be made available to all those interested in language description.

[94] *Parsing pReferences and ambiguity resolution in Hindi, Kannada, Telugu and Malayalam.* —
Atreyee Sharma, University of Hyderabad, India; Kamala Srivalli, EFLU, Hyderabad, India; Litty
Joseph, EFLU, Hyderabad, India; Vipasha Vaibhav, EFLU, Hyderabad, India

One of the fundamental issues in psycholinguistics research is the universality of constituent structure analysis. As there are restrictions on human immediate memory capacity, it is expected that humans adopt the first available constituent structure analysis. If this is true, we can expect the Minimal Attachment and Late Closure strategies to be universal, as it is said that these strategies are a result of adopting first analysis.

English adopts the Minimal Attachment and Late Closure approaches. However, there's not much evidence supporting the prediction of above strategies in other head-initial and head-final languages. Cross-linguistic research suggests that not all languages exhibit the same kind of grammatical or parsing pReferences when dealing with ambiguous resolution. This paper intends to check these parsing strategies for languages like Kannada, Telugu, Malayalam and Hindi (first three Dravidian and Hindi an Indo-Aryan language), and also see if there are differences in the attachment preference between Hindi and the Dravidian languages. Consider the examples below:

Kannada:
1) Srikar   ninne   hog-uth-ini   antha   heL-id-aa-ne
   Srikar   yesterday   go-present-1st person   (acts like that)   say-past-3rd person- male
   "Srikar said that he would go yesterday."
2) Naa-nu   ninne   nan-age   kott-iro   kelsamaaD-id-ini
   I-Nom   yesterday I-Dat   give-past participle work do-past-1st person
   "I did the work given to me yesterday."
Hindi:
3) Kal   Bob-ne   kaha   ki   wo   ja-ye-ga
   Yesterday Bob-Nom   say(pst) that   he   go-3prs.future
   "Bob said that he will go yesterday

All the above sentences have the adverb "yesterday" which can attach either with the corresponding main or embedded verbs.

Telugu:
4) Nenu Litty-ni   camera tho   choos-a-nu.
   I   Litti-Acc camera-Instr/Associative   see-past-1stperson
   "I saw Litty with the camera."
Hindi
5) Ladki-ko   mene   camere   ke saath   dekh-a
   Girl- Dat I-Nom   camera   Instr/Associative see.pst
   "I saw the girl with the camera."

The above sentences have the typical PP attachment ambiguity, where "with the camera" could be used as an instrumental (main clause attachment) or associative (subordinate clause attachment).

6) Anupam- ki   ishtam aithe Vipasha ni   oppinch-i   pelli   chesu-kun-taanu.
   Anupama-DAT like   if   Vipasha-ACC convince -1st person do-future-1stperson
   "If Anupama agrees I will convince Vipasha and marry her"

All the 6 sentences above exhibit different kinds of structural ambiguity. This paper attempts to study the operation of parsing principles and their corresponding ambiguity resolution in – Hindi, Telugu, Kannada, Tamil contributing evidences to the family of head-final languages. There has now accrued, however, a considerable body of evidence demonstrating that grammatical attachment p**References** are not absolute, but can change in particular circumstances. For this paper four reading time experiments (conducted using DMDX) representing the four languages will support the findings and take us to the universality or otherwise of these parsing principles. Intuitive evidence and a pilot study suggest a not so universal behavior of the aforesaid parsing principles, an initial questionnaire experiment based on the types of sentences mentioned show non minimal attachment pReferences in Kannada and Hindi.

References
Kimball, J. (1973) Seven principles of surface structure parsing in natural language Cognition 2, 15–47
Frazier, L. (1979) On Comprehending Sentences: Syntactic Parsing Strategies, Indiana University Linguistics Club, Bloomington
Fodor, J.A. (1983) Modularity of Mind, MIT Press
Frazier, L. (1987) Sentence processing: a tutorial review, in Attention and Performance XII: The Psychology of Reading (Coltheart, M., ed.), pp. 559–586, Erlbaum
Frazier, L. (1990) Exploring the architecture of the language processing system, in Cognitive Models of Speech Processing: Psycholinguistic and Computational Perspectives (Altmann, G.T.M., ed.), pp. 409–433, MIT Press
MacDonald, M.C., Pearlmutter, N.J. and Seidenberg, M.S. (1994) The lexical nature of syntactic ambiguity resolution Psychol. Rev. 101, 676–703
Trueswell, J.C. and Tanenhaus, M.K. (1994) Towards a lexicalist framework of constraint-based syntactic ambiguity resolution, in Perspectives on Sentence Processing (Clifton, C., Frazier, L. and Rayner, K., eds), pp. 155–179, Erlbaum
Frazier, L. and Clifton, C. (1995) Construal, MIT Press Cuetos, F. and Mitchell, D.C. (1988) Cross-linguistic differences in parsing: restrictions on the use of the late closure strategy in Spanis Cognition 30, 73–105
Pearlmutter, N.J. and MacDonald, M.C. (1995) Individual differences and probabilistic constraints in syntactic ambiguity resolution J. Mem.
Chambers, C. G., Tanenhaus, M. K., & Magnuson, J. S. (2004). Actions and affordances in syntactic ambiguity resolution. Journal of Experimental Psychology: Learning, Memory, and Cognition, 30, 687-696.
Knoeferle P., & Crocker, M. W. (2006). The coordinated interplay of scene, utterance, and world knowledge: Evidence from eye-tracking. Cognitive Science, 30, 481-529.

[95]   *Distribution of Tense and Aspect features in Rabha* — Agniv Dutta, Jadavpur University, India

This paper tries to make a comprehensive study of the distribution of tense-aspect-mood features in Rabha language. I have tried to give an explicit account of different kinds of verbs and verbal morphology of Rabha. I have also tried to make an attempt to identify the verbal inflections with respect to tense, aspect and mood involved in the language.

Rabha is a Tibeto-Burman language, which belongs to the group of Sal languages(Burling, 1983, as mentioned by Thurgood,2003) According to UNESCO's four levels of language endangerment between 'safe' and 'extinct', Rabha falls into 'vulnerable' status which means 'most children speak the language, but it may be restricted to certain domains'. It is spoken in Darrang Goalpara and Kamrup district of Assam, Alipurduar, Jalpaiguri and Kochbihar district of West Bengal, in the East and Western Garo hill districts of Meghalaya.The paper is based on the variety of Rabha spoken in Alipurduar district of West Bengal. This variety is continuously losing its linguistic properties due to the increasing dominance of Bengali, Hindi, Nepali and English.

The study is entirely based on a field work conducted in the North Khayerbari forest village in Alipurduar. Data was collected through one to one interactions with the informants. The questionnaire contained basic simple sentences in all the three tenses and aspects to identify the respective markers. I followed a questionnaire prepared by myself. The responses were recorded in written form (I.P.A transcription of the primary data) and also with the help of recorders.

I selected the verbs according to the four situation-types mentioned by Vendler(1967)-States(love, know, believe etc), Activity(write, eat ,swim etc), Accomplishment(paint a picture, grow up etc) and Achievement(find, recognize etc).

Examples:
Present Tense:
1. **aŋ sandagɔk naŋ -o   goʃa ciʈi   ɻuk   -a**
   1S everyday 2S -ACC   one letter write-HAB
   'I write a letter to you every day.'
Past Tense:
2. **aŋ naŋ -o   gɔʃa ciʈi ɻuk   -a   -mən**
   1S 2S -ACC one letter write -HAB -PAST
   'I used to write a letter to you.'
Examples:
Habitual:
3. **aŋ naŋ o   muk a   -mən**
   1S 2S   -ACC love -HAB –PAST
   'I used to love you.'
Progressive:
4. **naŋ cʰobi   aka -ta**
   2S   picture paint -PROG
   'You are painting a picture.'
Perfect:
5. **mi - wa   ci -tana -mən**
   boy -CLF die -PERF –PAST
   'The boy had died.'

References
http://**www.ethnologue.com/language/rah**
http//www.thegurdian.com/news/datablog/2011/apr/15/language-extinct-endangered
Thurgood, Graham and Lapolla, Randy J. 2003:'THE SINO-TIBETAN LANGUAGES'. Routledge

[96]   *Urban Farahi Pashto: An Acoustic and Articulatory Analysis of the Vowels* ― Komali Prakash, University, Hyderabad, India & Khalid Ahmad Siddiq, University, Hyderabad, India

Afghanistan as the only country where Pashto is officially and nationally accredited is a southern Asian nation. There are 41 living languages in the country. The Ethnologue categorizes the languages into 4 institutional, 5 developing, 19 are vigorous, 6 in trouble, and 7 in dying level (www.ethnologue.com last accessed on February 4, 2019). One of the well-established languages among others is Pashto. According to the Ethnologue, Pashto belongs to the North-Eastern group within the Iranian branch of Indo-European.

Pashto, in Afghanistan, is divided into three main dialects – "the Kandahar or western dialect, the Kabul or central dialect, and the Ningrahar or eastern dialect" (Tegey and Robson, 1996, pp. 6). Every dialect has its own phonological characteristics pertaining where and who would speak the language. As Tegey and Robson (1996) based their study on the Kabul or central dialect of the language, they have enlisted a 9-vowel inventory for it. However, the other dialects appear to have only seven vowels.

Farah is located in the southern-west region of the country. It is bordered to Iran – a Persian speaking country – internationally while nationally surrounded by Helmand, Herat, and Nimroz province. Herat and Nimroz are Afghan Persian speaking provinces. The urban area of Farah is mostly bilinguals with Pashto and Afghan Persian. A large majority of the population of this province has moved to Iran during the Russian invasion; therefore, even the suburban majority can speak Persian with a strong accentual effect of Irani Persian. As a province largely influenced by neighboring language i.e. Persian, its Pashto appears to be quite evidently deviating from both central or western dialect although attitudinally the local people associate their variation of Pashto with the Kandahari dialect.

The current study exclusively investigates the vowel variation in light of the three dialects proposed by Tegey and Robson (1996). Figure 1 on the right shows the 9-vowel chart for Central Pashto. The current researchers hypothesize that since majority of the people living the urban areas of the city are bilinguals who speak both Afghan Persian and Pashto together, and even the medium of instruction at schools is Afghan Persian, the Pashto they speak would largely be impacted by the

FIGURE 1 ADAPTED FROM MACKENZIE (2005)

Persian which could lead to a lower number of vowels compared to both central and western dialects. We are ruling out the possibility of the eastern Pashto because to the geographical distance between the regions.

The very main governing research questions are:

1. What are the acoustic characteristics of vowels in this dialect?
2. What vowels do Farahi dialect utilized?
3. Is it similar to either of the three dialects Tegey and Robson proposed or else?
4. If the vowels in this dialect vary from others, what type of vowel chart can be extracted?

References
Tegey, H. and Robson, B. (1996). *A Reference Grammar of Pashto*. Office of International Education (ED), Washington, DC.
The Ethnologue: Languages of the World. (n.d.). Retrieved February 04, 2019, from http://www.ethnologue.com/
MacKenzie, D. N. (2005). Pashto. In *The Major Languages of South Asia, the Middle East and Africa*. ed. Bernard Comrie. pp. 101-115. London: Routledge.

[97]   *Verbal Morphology in Mech: Analysis of TAM Categories & Vendlerian Classification* ─ Spandan Chowdhury & Prithivi Pattanayak, Jadavpur University, Kolkata, India.

Mech (IPA: metʃ) is the language spoken primarily by the Bodo people of West Bengal, India (Mech community). The language belongs to the Tibeto-Burman sub-family of languages within the Sino-Tibetan Language family. The Mech community of India belongs to the Bodo-Kachari group and have Mongoloid origin. According to UNESCO, Mech has been classified as a severely endangered language in India. In this paper, we aim to carry out a detailed analysis of the Verbal

morphology, pertaining to tense, aspect & mood markings, along with an analysis of situation types & Vendlerian classification of verbs.

The language is spoken in the northern part of West Bengal, India, primarily in the districts of Jalpaiguri & Alipurduar and in the Terai Regions in Himalayan foothills. For this study, primary data has been collected by questionnaire method. The language consultants were the native speakers of Mech residing in Chhekamari village in Madarihaat Tehsil, Alipurduar District, West Bengal. Leipzig glossing rules have been used for the study. It has been observed that the language does not have tense markings on verbs—instead it marks aspect and mood to indicate the temporal location and configuration of the event with respect to utterance time. There is a primary distinction between Realis and Irrealis (non-Future vs Future).

There are three main aspects (Habitual, Progressive and Perfective) which are marked on the verb, whereas the Imperfective aspect is specified by using Progressive marker (–ɖəŋ) for Process verbs, and Habitual marker (-nə) for Stative, Accomplishment and Achievement type verbs. The Habitual aspect is indicated by two suffixes {-wə, -nə}, with -nə being phonologically assimilated with respect to the place of articulation of the verb stem. However, it is not marked in Irrealis. The Progressive aspect is usually marked by the suffix –ɖəŋ, but for Future Progressive, the subordinate clause indicates temporal location as Future and the verb in main clause marks Progressive aspect. There are three Perfective aspect markers {-bai, -a, -o}, the default marker for non-Future being -bai, and -a is used for Future. Whereas, the marker -o is used only for non-motion verbs (like 'be', 'stay', etc.). It has been noted that, in case of Explicator Compound Verbs, the conjunctive participle (nu-) in V1 loses the vowel u in presence of Perfective marker -a. Apart from these, in studying Inchoative, Resultative & Iterative aspects, it has been found that separate lexical items (ʃuɾu for Inchoative and tʰaije for Iterative) are used. Iteratives are distinguished from Semelfactives by using the participle -nin with the verb.

In case of Mood, Irrealis is the marked feature and Realis marker (-muun) is only used to denote past event. Evidentiality characterises the nature of the speaker's information (such as hear-say, pre-conceived knowledge, first-hand knowledge, visual vs auditory knowledge, etc). Separate lexical items (epistemic verb) are used to indicate evidentiality.

The sentences are of the general format:

əŋ/bi	V$_{epi}$-bai	P
1sg/3sg	V-PFV	proposition
'I/He	V-PFV	P'

where V$_{epi}$ = epistemic verb.

For expressing deontic modality, deontic terms *saccʰi* and *oboʃʃoi* are used, with *oboʃʃoi* expressing a stronger degree of obligation. Potential mood and Optative mood are marked by separate lexical items *hagou* & *ləbəijə* respectively. In Imperative mood, infinitive forms of verbs are used without inflection.

According to Vendler's Aktionsarten, four verbs were studied: *mən-* (to love) [STATIVE], *məu-* (to do) [ACCOMPLISHMENT], *litʔ-* (to write) [PROCESS] and *naigiriʔna mɔn-* (to find)

[ACHIEVEMENT]. Multiple forms of same verb root exist based on semantic distinction, e.g., DO verb is of two types based on the feature [+/- abstract]: *məu-* [-abstract] & *kʰwaləm-* [+abstract], etc.

Thus, the language is morphologically rich and the verbal system is very different with respect to aspect and mood markings. This paper discusses all the above-mentioned phenomena and other interesting observations in detail.

References:

Abbi, A. (2001). *A Manual of Linguistic Fieldwork and Structures of Indian Languages*. Jawaharlal Nehru University. Lincom Europa, Muenchen, Germany.

Bauman, J.J. (1975). *Pronouns and pronominal Morphology in Tibeto-Burman*. (Unpublished Ph.D. Paper), University of California, Berkeley.

Bhat, D.N.S. (1999). *The prominence of Tense, Aspect and Mood*. Amsterdam and Philadelphia: John Benjamins.

Bhat, D.N.S, & Ningomba, M.S. (1997). *Manipuri Grammar*. Lincom Europa, Muenchen, Newcastle, Germany.

Binnick, Robert I. (1991). *Time and the Verb*. Oxford, England: Oxford University Press.

Bohnemeyer, J. (2019). *Elicitation and Documentation of Tense and Aspect*. Language Documentation and Conservation: University at Buffalo.

Brahma, D. (2014). *Inflectional Processes of Tense and Aspect in Bodo*. Language in India. Volume 14:1 January 2014, ISSN 1930-2940.

Chung, S. & Timberlake, A. (1985). *Tense, aspect and mood*. Language Typology and Syntactic Description, Vol.3, ed. By Timothy Shopen, 202-258. Cambridge: Cambridge University Press.

Comrie, B. (1985). *Tense*. Cambridge & New York: Cambridge University Press.

Coupe, A.R. (2013). *Tense, But in the Mood: Diachronic Perspectives on the Representation of Time in Ao*. Language and Linguistics 14.6:1105-1138, 2013.

Crystal, D. (2000). *A Dictionary of Linguistics and Phonetics*. Blackwell, USA.

Dahl, O. (1985). *Tense and Aspect Systems*. Oxford & New York: Basil Blackwell.

Givón, T. (1984). *Syntax: a Functional-Typological Introduction*. Vol.1. Amsterdam and Philadelphia: John Benjamins.

Hockett, C.F. (1958), *A Course in Modern Linguistics,* New York: Macmillan.

Holt, J. (1943). *Etudes d'aspect.* Acta Jutlandica 15.2.

Kearns, K. (2000). *Semantics*. London and New York: Palgrave Macmillan.

Kellogg, S.H. (1938). *A Grammar of the Hindi Language*. London: Routledge & Kegan Paul.

Kenny, A. (1963). *Action, Emotion and Will*. London: Routledge & Kegan Paul.

Klein, W. (1994). *Time in Language*. London: Routledge.

Li, C.N. & Thompson, S.A. (1981). *Mandarin Chinese: A Functional Reference Grammar*. Berkeley: University of California Press.

Lyons, J. (1968). *An Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.

Mayengbam, B.D. (2002). *Manipuri Verbs*. PhD Paper, Manipur University, India.

Mithun, M. (1999). *The Languages of Native North America*. Cambridge & New York: Cambridge University Press.

Palmer, F.R. (1986). *Mood and Modality*. Cambridge: Cambridge University.

Reichenbach, H. (1947). *Elements of Symbolic Logic*. London: Macmillan.

Robin, L.P. (2004). *The Experience and Perception of Time*. In Edward N. Zalta (ed.). The Stanford Encyclopedia of Philosophy, Stanford University, USA.

Ryle, R. (1949). *The Concept of Mind*. London: Hutchinson. Published (1963) Harmondsworth: Peregrine Books.

Singh, C.Y. (1999). *Tense And Aspect in Kuki-Chin.* Linguistics of the Tibeto-Burman Area, Volume 22.2, Fall 1999.

Thurgood, G. & LaPolla, R.J. (2003). *The Sino-Tibetan Languages*. Routledge Language Family Series, London, United Kingdom. Routledge.

Vendler, Z. (1967). *Linguistics in Philosophy*. Ithaca, NY: Cornell University Press.

Whaley, L.J. (1997). *Introduction to Typology-The Unity And Diversity of Language*. California, London, New Delhi: Sage Publications.

[98]   *Relation between Animacy & Case Marking in EIA Languages* — Bornini Lahiri, Central Institute of Hindi, Hyderabad, India

Animacy plays an important role in choosing the cases and their markers in the eastern Indo-Aryan languages. However, not much work has been done on the relation between animacy and case marking of eastern Indo-Aryan (EIA) languages. It may be so because ''animacy, or the distinction between animate and inanimate entities, is so pervasive in the grammars of human languages that it tends to be taken for granted and become invisible'' (Dahl & Fraurud, 1996, pp 47). The present paper discusses the variation in case marking occurring in EIA due to difference in animacy feature of an object.

The eastern Indo-Aryan languages are the languages which lies at the eastern belt of Indo-Aryan languages (Grierson 1931, Chatterji 1926, Katre 1968). In this paper I will discuss case marking of some of the EIA languages namely Asamiya, Bangla, Bhojpuri, Maithili, Magahi and Odia. These languages have different case markers based on the animacy feature of the object. In the EIA languages the most common hierarchy scale of animacy (Swart, Lamers & Lestrade, 2008) is followed. Here, animacy is characterized as a three-step scale: human > animals (animate) > inanimate

Many studies (Lazard 1998, and Aissen 2003) have shown that in many languages the object higher on the animacy or definiteness hierarchy tend to be case marked while those which are lower on the hierarchy scale are left unmarked. In Hindi (Mohanan, 1990), it was seen that animate objects get marked for accusative/dative case, while inanimates are marked only when they are definite.

In EIA languages animacy has its effect the most on the accusative/dative case as all these languages differentiate on the basis of animacy for the accusative/dative case. Accusative case is inherently taken as a case of animate entity (with some exceptions). It is followed by the locative and the instrumental case. These two cases are inherently taken as case of inanimate object (Narrog 2009). These two cases differentiate on the basis of animacy in Asamiya, Bangla and Odia (Lahiri 2013). Location is inherently inanimate and so is the instrument. However in some languages like Bhojpuri, Maithili and Magahi, there is no difference in location and instrumental marking based on animacy.

In EIA languages it was found that in some of the languages like Asamiya, Bangla and Odia, almost all case markers vary depending on the animacy feature of the object. For example, in Asamiya, and Bangla, case markers are different for accusative, locative, instrumental and ablative cases. Following are the examples of ablative cases in Bangla. The marker /t̪ʰeke/ is used when the source from which an object is getting separated is inanimate but when the source is animate then genitive marker /-er/ precedes the ablative marker /t̪ʰeke/.

1. *gacʰ **t̪ʰeke** phɔl porlo*
   tree Abl fruit fell
   Fruit felt from the tree.

2. *cʰatro* *ʃikəkʰɔk-**er*** ***ʈʰeke*** *boinilo*
   student teacher-GenAbl book took
   Student took book from the teacher.

In Odia the things are more interesting as it is the only major EIA language in which the genitive case marker differentiates between the animate and the inanimate object. The Odia case marker for genitive marker is /-r/. However it is dropped when the possessor is inanimate. Hence there is no relation of possessor- possessed, rather it becomes a compound. But same type of compounding is not possible in other EIA languages like Bangla, Maithili, Bhojpuri, Asamiya etc. In the following example the Odia genitive marker is used when the possessor is animate (e.g.3) but when the possessor is inanimate then the marker is dropped (e.g.4).

3. *rim-**ar*** *gari*
   Rima-Gen car
   Rima's car.
4. *gari* *cɔkka*
   Car wheel
   Car's wheel

Linguistic manifestation of animacy does not follow the biological dimension of animacy. It is perceived that despite strong pReferences for a certain animacy value of nouns, speakers may conceptualize nouns differently from this preferred value in different contexts. So it was seen that a '*doll',* though is inanimate*,* may be perceived as animate. In the following Bangla example it can be seen that the "doll" is taking /ke/ marker (e.g.5) which is used mainly with animate objects (e.g.3). But without the marker the following sentence becomes ungrammatical. But with table (inanimate) the accusative marker is not used (e.g.6).

5. *ami putul-ta-**ke*** *poriʃkar korlam*
   I doll-Clf-Acc clean did
   I cleaned the doll.
6. *ami* *tebil-ta* *poriʃkar korlam*
   I table-Clf clean did
   I cleaned the table.
7. *ami bacca-ta-* ***ke*** *poriʃkar korlam*
   I child-Clf-Acc clean did
   I cleaned the baby.

The present paper deals with the various aspects of effects of animacy on case markers of EIA languages. The usages of the markers are justified and a cross-linguistic description is presented.

References
Aissen, J. (2003). Differential Object Marking: Iconicity vs. Economy. *Natural Language and Linguistic Theory* 21, 435–483.
Chatterji, S. K. (1926). The Origin and Development of the Bengali Language. New Delhi: Rupa and Co.
Dahl, O. Fraurud, K. (1996). Animacy in grammar and discourse. In: Fretheim, Th., Gundel, J.-K. (Eds.), *Reference and Referent Accessibility*. Benjamins, Amsterdam, pp. 47–64.
Grierson, G.A (1931). Linguistic Survey of India. Vol- V. Reprint. Delhi 1968: Motilal Banarasidass.
Katre, S. M. (1968). Problems of reconstruction in Indo-Aryan. Shimla: Indian Institute of Advanced Study.

Lahiri, Bornini (2013). A typological study of Local cases of EIA languages. Journal of Universal Language 14(1) 85-115.

Lazard, G., (1998). *Animacy*. Berlin/New York: Mouton de Gruyter.

Mohanan, T., (1990). *Arguments in Hindi*. PhD dissertation, Stanford: Stanford University.

Narrog, Heiko (2009). A Diachronic Dimension in Maps of Case Functions. *Linguistic Discovery* 8(1): 233-25.

Swart, Peter. de., Lamers, M., & Lestrade, S. (2008). Animacy, argument structure, and argument encoding. *Lingua* 118, 131–140. Retrieved from

http://www.sciencedirect.com/science/article/pii/S0024384107000307

[99]   *Comparing honorificity agreement in Maithili and Bangla* — Preeti Kumari, Indian Institute of Technology, New Delhi, India

The system of honorifics in languages has been placed at the interface of syntax and semantics by works such as Portner, Pak and Zanuttini (2018) and Pak (2015). This system is represented in many languages in the form of honorification agreement (Harada, 1976; Toribio, 1990 and Boeckx and Niinuma, 2004). This paper analyses the honorification system of Maithili and compares it to that of Bangla, both of which are Eastern Indo-Aryan languages. One major claim of this paper is that Maithili honorification system shows that when a pragmatic phenomenon such as politeness is incorporated in the syntax, it leads to the number feature getting reanalysed as 'honorificity' feature. This reanalysis has resulted in the complete loss of number inflection in Maithili. There are previous typological accounts that have noted the loss of number giving rise to honorifics in Maithili (Grierson, 1983-87 and Bloch, 1965). However, the mechanism of this reanalysis is not very clear and therefore this paper looks at the process of number changing into honorificity. This reanalysis claim draws from similar remarks made for Dutch and Braj by Chandra (2017) and for some other languages such as French and Tamil by Malsch (1987). In order to figure out the honorification mechanism of Maithili, the particular construction types in focus are cases of subject agreement (1), addressee agreement (2) and multiple argument agreement (3), i.e., both subject and object.

1.a. əhã   əe-nu
     you(2H) come-(2H)
      'You came'
   b. tõ   əe-l-əh
      you(MH) come-Past-(2MH)
       'You came'
   c. tõ   əe-l-e
      you(NH) come-Past-(2NH)
       'You came'
2.a. *həm khana kha le-li-əu*   (addressal to a non-honorific entity)
      I   food   eat do-PERF-(Add(-Hon))
       'I have eaten'
   b. *həm khana kha le-nəu* (addressal to an honorific entity)
      I   food   eat do-PERF-(Add(+Hon))
       'I have eaten'
3.   *o   to-ra   dekh-əl-thunh*
     he(+Hon) you(-Hon)-acc/dat   see-Past-(3H + 2NH)
      'He(H) saw you(NH).'

These honorification agreement cases establish honorificity as a feature in the syntax. Therefore, following Borer-Chomsky conjecture (Borer, 1984), which says that all linguistic variation can be pushed to features, this paper finds out the points of honorificity variation between Maithili and Bangla. Bangla has also been

noted to have lost number inflection and given rise to honorification (Chatterjee, 1926). However, Bangla doesn't have addressee agreement and neither does it have multiple argument agreement. Therefore, this comparative study shows how honorificity feature leads to meso-level variation in languages (Biberaruer and Roberts, 2015).

This paper explains the repercussions that the syntax of a language faces when a pragmatic phenomenon such as politeness is incorporated in the syntax. It also illustrates the mechanism of this incorporation with the case of Maithili honorification. Finally, this paper explains meso-level variation in the honorification system of Bangla and Maithili.

References
Biberauer, Theresa and Ian Roberts. 2015. Rethinking formal hierarchies: a proposed unification. In: J. Chancharu, X. Hu & M. Mitrović (eds.). *Cambridge Occasional Papers in Linguistics* 7: 1-31.
Bloch, Jules. 1965. Indo-Aryan from the Vedas to modern times. Translated by A. Master. Paris: Adrien—Maisoneuve.
Boeckx, Cedric and Fumikazu Niinuma. 2004. Conditions on Agreement in Japanese, Natural Language and Linguistic Theory 22, 453–480.
Borer, Hagit. 1984. Parametric syntax: case studies in Semitic and Romance languages. Dordrecht: Foris.
Chandra, Pritha. 2017. Micro-comparing 2nd Person-Plural Interaction. Manuscript, Indian Institute of Technology, Delhi.
Grierson, George A. 1895. An Introduction To The Maithili Dialect Of The Bihari Language As Spoken In North Bihar. The Asiatic Society.
Harada, Shin-Ichi. 1976. 'Honorifics', in M. Shibatani (ed.), *Syntax and Semantics 5*, Academic Press, New York, pp. 499–561.
Malsch, Derry L. 1987. The Grammaticalization of Social Relationship: the Origin of Number to Encode Deference. In Giacalone Ramat, Anna and Carrubo, Onofrio and Bernini, Giuliano (eds.), Papers from the 7th International Conference on Historical Linguistics, 405-418. Amsterdam: John Benjamins.
Pak, Miok. 2015. Towards understanding the syntactic representation of honorifics in Korean, in Whitman, John and Lucien Brown (eds.), Honorific language and linguistic politeness in Korean**, *Korean Linguistics*17:2. 132-166. John Benjamins
Portner, P., M. Pak and R. Zanuttini. (to appear) "The speaker-addressee relation at the syntax-semantics interface." Language.
Toribio, Almeida. 1990. 'Specifier-head Agreement in Japanese', in *Proceedings of* WCCFL 9, CSLI, Stanford, pp. 535–548.

[100] *Euphemism as Ellipsis: A Study of Euphemistic Vocables in the Folk Songs of Malabar*[17] —
Anupama Sujatha, EFL University, Hyderabad, India

Abstract: A euphemism is a linguistic device that is used when the subject is culturally suspect. In other words a euphemism (from Greek *euphemismos* meaning 'speaking well') is deployed while speaking about taboo concepts. According to Lyons, euphemism is a pragmatic choice, opted for in light of diversified contextual factors such as social role or status, spatial and temporal location, the medium, and subject matter, among other things. The use of euphemism in the folk songs of Malabar appears as a tool to mask brutal sexual exploitation of women.

My paper is a study of euphemistic words used in the folk songs of Malabar while referring to women and their sexuality. It is an attempt at decoding the import of the words to unmask cultural biases and hypocrisy associated with female sexuality. It is also an attempt to interrogate received notions about the treatment of women historically and the freedom they are supposed to have enjoyed.

---

[17] Malabar is a coastal area in the south western part of India.

Malabar is significant because it is one of the few places in the world where matriarchy prevailed. Historically, in that region, women owned property and it passed from mother to daughter. In fact, unlike other places in India, women in Malabar learnt martial arts and had a say in matters of marriage and divorce. Women appear to have a lot of sexual freedom. They had the right to marry and divorce at will, they could engage in sexual encounters before marriage or outside marriage. However, a linguistic study of euphemisms in Malayalam folk songs of this region known as *Vadakkan Pattukal* (Northern Songs) reveal hidden power structures.

The fact that language reflects embedded cultural perceptions, prejudices and power structures cannot be contested. Scholars like Lakoff have studied how words have been used to marginalise, denigrate and emasculate women's position in society. Critical linguists (Halliday, Dijk, Fowler et al.) also argue that discursive structures or linguistic usage encodes ideological patterns that reflect and reinforce entrenched positions and perspectives. Viewed from the vantage of Sperber and Wilson's *higher level explicature* (I-inferences in neo-Gricean reading) one realizes that the propositional attitudes prevalent at the time viewed women as mere sexual objects that could be bought, exchanged, or expropriated as possessions. While there are whole sets of words in any language that disempower, even denigrate women, a closer examination of euphemisms also reveal entrenched cultural misogyny which marks the spoken language. This is the premise of my study.

References
Allan, Keith, and Kate Burridge (1991) *Euphemism and Dysphemism: Language Used as Shield and Weapon*. New York: Oxford University Press.
Farghal, Mohammed. "Euphemism in Arabic: A Gricean Interpretation" *Anthropological Linguistics*, Vol. 37, No. 3 (Fall, 1995), 366-378
Grundy, Peter. (2008) *Doing Pragmatics*. London: Hodder Education.
Lakoff, Robin. "Language and Woman's Place" *Language in Society*, Vol. 2, No. 1 (Apr., 1973), 45-80
Leech, G. N. (1983) *Principles of Pragmatics*. London: Longman.
Levinson, Stephen. (1983) *Pragmatics*. Cambridge: Cambridge University Press.
---. "Cognition at the Heart of Human Interaction" Discourse Studies, Vol. 8, No. 1, (February 2006), 85-93
Lyons, John. (1968) *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.
---. (1977) *Semantics*. 2 vols. Cambridge: Cambridge University Press.
Schwarz, Nobert. (1995) "Social Cognition: Information Access and Use in Social Judgement" in *An Invitation to Cognitive Science* II edition Vol 3 Ed Osherson, Daniel N. and Edward E. Smith. Massachusetts: MIT Press.
Wallace, Anthony F. C. (1970) "Culture and Cognition" in *Language, Culture, and Cognition: Anthropological Perspectives*. Ed; Casson, Ronald W. New York: Macmillan.

[101]   *Culture and Identity of Regional and Minority Languages in India in the Era of Globalization* ─
Rajeev Vasudevan, Central University of Kerala, 671316, India

For the existence of a language, its culture and its social system are indispensable. India is known for its multilingualism. The hierarchy of linguistic functional load is attested by India's history and tradition. Languages are placed in this hierarchy considering power exerted upon society. Globalization is a great threat against all indigenous systems. It is very important to problematize the issues like gender, ethnicity and religion   to protect one's unique identity.

It is high time that we should activate the discourse on the identity of each language and its culture. Any type of domination will degenerate the very existence of a society and its systems. Colonization and other political reasons may wipe out minority languages. We have experienced this type of domination on regional

languages in India for long periods. The vital issue in contemporary discourse is the protection of identity of all systems. It is undeniable that ethnic identity has strong relation with religion and language.

Linguistic domination and cultural suppression will sabotage social order. Globalization through the identity medium of English has jeopardized the continuance of regional languages and their micro cultures. English has been strategically appropriated as a vehicle for globalization. The period of globalization is also a period of transition and transformation. This type of change is not progressive but regressive and disastrous. We should be careful to protect and preserve our individual languages and cultures. So, every linguistic group should defend its own identity rather than deconstruct it.

This crisis can be remedied only through effective linguistic policies taken by government and by greater cultural consciousness on the part of minority languages. This paper is an attempt to study the culture and identity of regional and minority languages in India in the present era of globalization.

Reference

Yogendra Singh, Culture Change in India - Identity & Globalisation, Rewath Publication, 2000: New Delhi

Matthias Koenig, International Journal on Multicultural Societies, *Rajeshwari V. Pandharipande*, *Minority Matters: Issues in Minority Languages India*, Vol.4, No2, 2002: UNESCO

Eleonore Kofman & Gillian Youngs, Globalization Theory & Practice, *Simon Dalby*, 2007: London

Paul Cobley, (Ed) Semiotics and Linguistics, Routledge, 2001: London

Jones Pip, Introducing Social Theory, Atlantic, 2005: New Delhi

[102] *Morpho-Syntactic Sketch of a Lesser known Language: Dirang Monpa* — Ankita Karmakar Central Institute of Indian Languages, Mansagangotri, Mysore - 570006, India; D. Srikanth Kumar, University of Mysore, Mysore, Karnataka, India

Dirang Monpa, which is spoken in the state of Arunachal Pradesh of this country India, is one of the endangered Tibeto-Burman languages falling under the East Bodish branch of Sino-Tibetan family and it has got approximately 6,000 souls (cf. Dasgupta 1999:230). This paper makes an attempt to deal with the morpho-syntax of Dirang Monpa. Dirang Monpa is morphologically agglutinative and is a non-tonal one distinct from other Tibeto-Burman languages that have tone. This paper will focus on the morpho-syntactic phenomena of the following structures: adjective + noun; relative clause + noun in the case of relativization and nominalization; demonstrative + noun; numeral + noun; degree word + adjective and some basic word-order descriptions. Also, this paper tries to explore the idea of case syncretism in this language following basic principle of syncretism where a particular morphological form can exhibit various functions in different syntactic environments. To concretize the running idea behind the theme, the paper basically finds out the two-way distinction in demonstrative system in terms of semantics focusing on the syntactic distributions of these demonstrative elements. It will also cover up some aspects of noun ellipsis tracing the way how nominal inflections such as accusative case and plural markers can be found glued to the demonstrative when the noun in the expression is elided. In this way, demonstratives in Dirang Monpa can function as independent phrases when they function as subject or object of the predicate. On the one side of the paper, it is interesting to enlighten the existing phenomenon that, in Dirang Monpa, Ergative Case marker and Instrumental Case marker are morphologically realized by the same element *-gi*; and in the same fashion, both Accusative and Dative as well as Locative are realized by the marker-*ga*.

This study represents the summary status in terms of various linguistic findings under the fieldwork undertaken by the **S**cheme for **P**rotection and **P**reservation of **E**ndangered **L**anguages, **C**entral **I**nstitute of **I**ndian **L**anguages, Mysuru during the month of June 2017.

References

Andvik, Erik E. 2010. *A Grammar of Tshangla*.Brill's Tibetan Studies Library, Leiden.
Blench, Roger. 2014. *Sorting out Monpa: The Relationship of the Monpa Languages of Arunachal Pradesh*. United Kingdom: Kay Williamson Educational Foundation.
Das Gupta, K. 1968. *An Introduction to Central Monpa*.Shillong: North-East Frontier Agency.
Das Gupta, R. [2nd ed.] 2007. *An Introduction to Central Monpa11*. Itanagar: Director of Research, Arunachal Pradesh Government.
Dutta, D.K. 1999. *The Monpas of Kalaktang: Arunachal Pradesh*. Itanagar: Director of Research, Arunachal Pradesh Government.
Lama, Tashi 1999.*The Monpas of Tawang*.Itanagar: Himalayan Publishers.
Norbu, Tsewang 2008.*The Monpas of Tawang*.Itanagar: Director of Research, Arunachal Pradesh Government.

[103]   *Normative Data on the Speaking Fundamental Frequency Values of the Indian Bilingual Speakers: A Forensic Phonetic Study* ─ Grace Didla, EFLU, Hyderabad, Telangana, India; Swapna Akoju, Gurunanak Institute of Technology, Hyderabad, Telangana, India

Forensic Phonetics predominantly entails identifying the criminals based on their speech samples. In forensic speaker identification "an utterance from an unknown speaker has to be attributed, or not, to one of a population of known speakers for whom reference samples are available" (Nolan 1983:9). Identifying people based on their speech has gained importance in the recent past. One of the aspects of Forensic Phonetics, Speaker Profiling (i.e. identifying the ethnicity, age, gender etc. based solely on the speech), has gained immense significance in the world of crime. In other words, in the event of commission of a crime, the investigating agencies would benefit greatly if they can identify the indexical features (age being one of them which is the focus of the current study) of the incriminating speech sample. This may eventually aid them in narrowing down their search for the perpetrator.

Speech correlates of Forensic Speaker Identification
There are several segmental and suprasegmental features of speech, which when analysed properly, aid in forensic speaker identification. One of the suprasegmental features, speaking fundamental frequency (SFF), which is a long-term average of fundamental frequency, is identified as a robust parameter in the speaker identification process. Nolan (1983) expounded that the average SFF plays a major role in the speaker identification process.

Background Literature
In the area of Forensic Speaker Identification, it has been well established that the acoustic feature 'Pitch' (a perceptual correlate of fundamental frequency) is a good indicator of speaker's identity (Rose, 2002). In the light of this, quite a substantial work has been carried out on the pitch values of different ethnic groups in the world such as: Caucasians (Hollien & Shipp,1972), Afro-Americans (Hudson & Holbrook, 1982) and Mongoloids (Nishio & Niimi, 2008), to name a few.

The Present Study
It is noteworthy that, thus far, several attempts have been made in identifying the SFF values of different ethnicities in the world. However, when it comes to research on Indians on there exists a serious dearth of research on SFF values from the forensic phonetic point of view.

Aim
The aim of the study is four-fold: 1) to obtain normative data on the speaking fundamental frequency (SFF) of Indian bilingual speakers, 2) to explore if the language used (English and Telugu) has any effect on the

SFF values, 3) to identify if the mode of speech (spontaneous and Read) has any bearing on the SFF values, and 4) to compare the SFF values of Indian speakers across four different age groups to see if any differences exist.

Methodology
The study included 40 Indian bilingual speakers (20 male and 20 female) whose ages ranged from 11-50 years. The speakers were categorized into four different age groups (11-20, 21-30, 31-40, and 41-50). All the subjects were native speakers of Telugu Language who were also proficient in English. Speech samples were recorded in two modes of speech (spontaneous and read). Each speaker was asked to read out phonetically balanced passages, one in English and another in Telugu. The subjects were also asked to talk spontaneously for a minute in each of the languages (Telugu and English) on a given topic.

Analysis
Once the speech samples were recorded, the pitch values (of both the read and spontaneous speech samples) were obtained for every ten seconds using PRAAT software and the average of those values has been calculated. The obtained Pitch values were compared across the several age groups chosen.

Findings
- The following is a summary of the conclusions drawn from the study.
- The normative data on the average SFF values of the male speakers across different age groups is as follows: 11-20 years (176 Hz), 21-30 years (135Hz), 31-40 years (125 Hz) and 41-50 years (129 Hz).
- The normative data on the average SFF values of the female speakers across different age groups is as follows: 11-20 years (238 Hz), 21-30 years (215 Hz), 31-40 years (216 Hz) and 41-50 years (176 Hz).
- Irrespective of the age group, the language used has no bearing on the SFF values of both the male and female speakers.
- It may be noted that the two modes of speech (spontaneous and Read) tested did not yield any difference in the SFF values.
- It may be observed that as the age progressed from 21-50 years, in both the genders there was a significant drop in the SFF values.
- SFF is a key element in forensic speaker identification. The uniqueness of an individual is reflected through the pitch apart from many other aspects. Like many other physiological changes, vocal folds also undergo several changes with age, thereby exhibiting different SFF values across different age groups. Therefore, it is important to compare these changes across different age groups.

References
Hollien, H. & Shipp, T. (1972). Speaking fundamental frequency and chronologic age in males. *Journal of Speech and Hearing Research, 15*, 155-157.
Hudson, A. I., Holbrook A., (1982). Fundamental Frequency Characteristics of Young Black Adults. *JSHR*; 25: 25-28.
Nishio, M., Niimi, S. (2008), Changes in the Speaking Fundamental Frequency Characteristics with Aging. *Folia PhoniatrLogop* 60: 120-127.
Nolan, F. (1983). *The Phonetic Bases of Speaker Recognition*, Cambridge: Cambridge University Press.
Rose. P. (2002). Speech Acoustics. *Forensic Speaker Identification*. Taylor & Francis, pp.52.

[104] *Morph-Phonology of diacritics - The case of Bindi ◌̈ in Punjabi* ― Harjit Singh, Indira Gandhi National Tribal University, Amarkantak, Madhya Pradesh (484887), India

Diacritics are generally known as dependent on segmental sounds (e.g. vowels) and are important part of super-segmental phonology. Likewise (tone, intonation and stress), this is another type of phonemic representation in morphological pairs. It generally happens when diacritical marker such as bindi ◌̈ except of (addhak and tippi other forms) in Punjabi used in different pairs. In briefly, this paper studies the nature and uses of bindi ◌̈ particularly in word-morphology to show along with (derivational and inflectional) word-formation processes. Anderson (1992) broadly re-investigated morphemes, clitics and the interface between phonology and syntax with morphology. However he has less discussed diacritics in general or typological manner. Like Anderson, Aronoff and others such as Fudeman (2011) also not much serious about studying diacritics at morphological level. By and large, the main purpose of this investigation is to study diacritics in sort of its phonological and morphological backgrounds. We have total four sections here. In the first section, we deal possible forms of diacritics such as (addhak ◌̈; tippi ◌ ◌̈; and lastly bindi ◌̈). In the second section, we frame some instances of only bindi ◌̈ diacritical marker to demonstrate the change of semantics when such marker comes with long vowel '-ɑ:' in the second pair. It is given below in table no. 1.

dʒ ɑ: = (Verb)	dʒ ɑ:̃ = (Coordinator)
'Go'	'Or'
gɑ: = (Verb)	gɑ:̃ = (Noun)
'Sing'	'Cattle'
kʰɑ: = (Verb)	kʰɑ:̃ = (Noun)
'Eat'	'Title'
nɑ: = (NEG)	nɑ:̃ = (Noun)
'Not'	'Name'
d̪ɑ:t̪ ɑ: = (Noun)	d̪ɑ:t̪ ɑ:̃ = (Noun)
'God'	'Blessings'
t̪ɑ:ɹɑ: = (Noun)	t̪ɑ:ɹɑ:̃ = (Noun)
'Star'	'Wires'
pɑ:kkʰɑ: = (Noun)	pɑ:kkʰɑ:̃ = (Noun)
'Fan'	'Feathers'
sut̪t̪ɑ: = (Verb)	sut̪t̪ɑ:̃ = (Verb)
'To smoke'	'To push'

Table no. 1

It is noticed that the semantics of first row of the table does not match with the second row of the above instances because of using only bindi ◌̈ here. The third section will further continue with discussing morpho-phonological structure of above instances in terms of derivation and inflection.

Derivation	Inflection
dʒ ɑ: = (Verb) -→ dʒ ɑ:̃ = (Coordinator)	d̪ɑ:t̪ ɑ: = (Noun) → d̪ɑ:t̪ ɑ:̃ = (Noun)
'Go' 'Or'	'God' 'Blessings'
nɑ: = (NEG) → nɑ:̃ = (Noun)	t̪ɑ:ɹɑ: = (Noun) → t̪ɑ:ɹɑ:̃ = (Noun)
'Not' 'Title'	'Star' 'Wires'
gɑ: = (Verb) → gɑ:̃ = (Noun)	pɑ:kkʰɑ: = (Noun) → pɑ:kkʰɑ:̃ = (Noun)
'Sing' 'Cattle'	'Fan' 'Feathers'

ḍɑːkkɑː = (Noun) → ḍɑːkkɑ̃ː = (Verb)	suʈʈɑː = (Verb) → suʈʈɑ̃ː = (Verb)
'Match-stick' 'To push'	'To smoke' 'To push'

Table no. 2

While in the fourth section, it concludes that diacritical marker bindi ◌ functions like derivation and inflection simultaneously. In all inflection cases, we can see change of semantics under nominal categories, e.g. (ḍɑːʈɑː = (Noun) → ḍɑːʈɑ̃ː = (Noun); ʈɑːɹɑː = (Noun) → ʈɑːɹɑ̃ː = (Noun) etc. It is also interesting to note here that if we claim that there is a repetition of such pairs.

References
Bybee, Joan L. 1985. *Morphology*. Amsterdam: John Benjamins.
Harris, Zellig 1942. Morpheme alternants in linguistic analysis. *Language* 18: 169-180.
Mohanan, K.P. 1982. *Lexical Phonology*. Ph.D. thesis, MIT. Published 1982 by Indiana University Linguistics Club, Bloomington.
Matthews, Peter H. 1972. *Inflectional Morphology*. Cambridge: Cambridge University Press.

[105] *Gemination in Malayalam: Evidence for phonological productivity* — Anjali Nair, Jawaharlal Nehru University, New Delhi, India

The definition of productivity has been widely disputed in contemporary literature (Bauer,2003). However, what constitutes a 'productive process' in word formation is largely discussed only in the context of morphological processes. This is most evident in Aronoff (1985), where productivity in word formation is described as being directly proportional to the semantic coherence of the respective form.

Though morphological processes like affixation and blending are some of the most productive means of word formation (Lieber, 2017), they are often accompanied by phonological conditioning. However, most accounts explain these co-occurring phonological processes in the context of how they constrain the morphological productivity during word formation (Rainer, 2005). This paper on the other hand, considers the occurrence of a certain phonological process in Malayalam creating a motivating environment for various derivational word formations, thereby making a strong case for the productivity of phonological processes.

Consider the following example, which are derivations of [oːʈə] "run":

(1) [oːʈʈʌm] – "run" (Noun)
(2) [oːʈʈʌl] – "running" (Gerund)
(3) [oːʈʈə-ʋʌɳḍi] – "running vehicle" (Compound)
(4) [oːʈʈiccu]- run.CAUS.PST

In the above examples, [oːʈə] forms a deverbal, gerund, compound and a causative respectively by geminating its final consonant prior to the derivational affix. This indicates that in Malayalam, gemination seems to be a highly sought-after process for stem extension in order to obtain varied concatenations in derivational morphology.

Bybee (2004) claims that when a phonological process, occurs in different unrelated morphological contexts, each context of their occurrence becomes independent of the other. This paper argues against morphology-based theories like Bybee's in favor of a generative framework aimed at descriptive economy.

By closely examining the nature of this morphologically conditioned gemination, this paper aims at raising two challenges of theoretical significance. Firstly, the morpho-phonological processes like gemination will need to be formalized within the theory of productivity in word-formation. Second, if phonological productivity stands empirical ground, semantic coherence as a condition for productivity becomes a questionable notion. This contests the current understanding of productivity, expanding the scope of its study to domains outside of morphology.

References
Aronoff, M. (1985). *Word formation in generative grammar*. 3rd ed. Cambridge, Massachusetts: Massachusetts Institute of Technology, pp.35-44.
Bauer, L. (2003). *Morphological productivity*. 2nd ed. Cambridge (England): Cambridge University Press, p.12.
Bybee, J. (2004). *Phonology and language use*. Cambridge: Cambridge University Press.
Lieber, R. (2017, March 29). Derivational Morphology. *Oxford Research Encyclopedia of Linguistics*. Ed.
Rainer, F. (2005). Constraints on Productivity. In *Handbook of Word Formation* (Vol. 64, pp. 335-344). Dordrecht: Springer.
[106] *Word Formation in Rabha: A Preliminary Investigation* —Nilanjana Chowdhury, Jadavpur University, Kolkata, India

The Rabha of North Bengal was separated from their original unified tribe at least a century ago. The village shares border with Bhutan and West Bengal. According to UNESCO (ISO 639-3), this is a severely endangered language in India. Rabha is included amongst the Koch which is an indigenous community in the Northern Part of West Bengal. The Rabha Language has quite a few dialects but my main concern in this paper is to focus mainly on the word formation aspects of standard Rabha variety. Many of the Rabha community members have migrated from Bhutan for work and many are married to this community from other communities. There is a blend of different languages like Bhutanese, Rabha, Bengali, and English. The younger generation uses more of English words and in a few cases it has even been seen that they have even forgotten some of the Rabha words and have replaced it with either Bengali or English.

The Rabha language has its own numeric system which is gradually falling into disuse because the community, especially the younger generations rampantly use the Bengali numeric system. The older generations still know the words for the major numbers but the intermediate numbers are almost erased from their collective memory.

The Word Formation Process is a morphological process of how new words are formed in language. The process consists of a combination of morphemes that are rule-governed (a new word is formed). In this language both free and bound morphemes are seen, whereas in the latter part morphemes are not seen to appear separately, but mainly with the affixes. More than one monosyllabic word (that is free morpheme in nature) may be tagged together to form a compound word. Agglutinating characteristic is a typological phenomenon in the structure of word. In this process an inflectional or derivational word may be formed by adding prefix or suffix (-es). Suffixes may be added in a linear sequence to get different extended meaning(s). Some of the observations seen during the study of the Rabha language are –

- Inflection, which consists of number, tense and case. For example: the word *eniŋ* is used for dual cases and *ʈakri* is used for plural cases. Like, *eniŋ fuŋ* means 'two trees' and *ʈakri fuŋ* is means 'many trees'. There are even usage of inflection markers in case system;
- The usage of tense is seen quite extensively in Rabha which consists of all the 3 types that are past, present and future. It also has 3 distinct morphemes which are added to the root verb to indicate the three different types of tense. Adding a marker to the root word changes its tense. For example if the root word is *sa* which means 'to eat', by adding -*ʈana*, -*iʈa* and -*na* with the root word changes it to past, present and future respectively;

- Due to contact with other languages, Rava borrows numerous loan words from almost all the languages that it comes in contact with, like *tebɛl, kʰata, paisa* and many more;
- Reduplication is also seen in Rabha, where new words are formed either by doubling an entire or part of a word. Like, **sʌmi sʌmi** *bocʰoiṯɛ afa* the literal translation of which means 'bring sweet sweet mangoes';
- Rabha also shows the compounding where words are added to the language, that is, (Noun + Noun) or (Noun + Verb);
- The usage of gerund is also seen in the language in contrast to the addition of the –ing as in English;
- Derivational Process can also be seen in the language where the adding of bound or free morphemes to root words to extend the meaning of an existing word as well as just extending a word to a grammatical category. This is accomplished by adding affixes. For example: *aŋ corṯana pæsa niganən* the literal translation of which is in Bengali, that is, আমি চুরি করেছি টাকার দরকারে .

The study is based on an extensive fieldwork in North Kairbari Forest Basti, Madarihat, Alipurdur. The data primarily has been collected based on own encounter with people in the village. Data has been collected through interviews with the Koch speakers. The methods used for the collection of the data are: Interviews, audio recording and questionnaire. The data has been collected from almost 15 – 20 informants, which includes male and female of all age groups.

This paper attempts a preliminary analysis of the aforementioned observations seen during the study. The analysis of the data is based on the data collected from the village which was a part of the vitality analysis of the speech community.

References
ChagPidan: 1988: Pt-1,2,3 & 4: *Primer Written in Standard Rabha Language',* prepared by the Runchum, and Published by the Govt, of Assam, Text BookProduction Committee, Guwahati.
Hurang: 1987: *A Mouthpiece of All Assam Koch Association,* 1st issue, ed. Khalin Koch, Borkana.
Hag Hurang: 1987: *Rabha Word Book,* Dhubri District Committee, BRKR.
Fai Nang Parhanga: 1963: A Rabha Primer for Adults, published by Evangelical Literature Depth, Calcutta, RBCU, Devitola (Dhubri).
Rasan: 1974: *An Annual Megazine of Meghalaya Koch Association* (MKA), ed. Abanath Koch, Ampati.
Penem Lamon Dam*: 1926: A Collection of Devotional Songs for Lord Risi* (Shiva), by Puma Chandra Koch (Rabha), Dhubri.
Champai: 1978: *A Collection of Baikhu Songs,* ed: Listi Rongkho, Baida.
Hurchai Hurchai: 1971: *Devotional Songs for Baikhu Festival,* collected by Listi Rongkho, Baida.
Penem Lam*: 1960 (Way of Salvation): An Apostle translated by Satyen Chapar,* Printed and published by Norman A. Ellis, Baptist Mission Press for RBCU, Debitola, Dhubri.
Songrayi Rabha Katha*: 1951: A primer, by Adhar Chandra Rabha* (Bantho), printed by Sukumar Press, Dhubri.
Zisuni Nemkai Marknai Saikai Katha*: 1909: A Gospel by Mark, translated into Rongdoni Dialect*, published by British & Bible Society of London, printed at Baptist Mission Press, Calcutta.
MusugDammai: 1973: A Souvenir of the North Goalpara Kocha Rabha Students' Union 1st issue; ed. B. Koch, Kokrajhar.

[107] *Hindi as a Contact Language in Jharkhand- Evolution, Structure & Use* ─ Sabiha Hashami, IIT Goa, India

Jharkhand was carved out of Bihar in November 2000 with Ranchi as the capital. The state was formed in name of tribes, tribal languages, and culture. Jharkhand with population of 32,988,134 (census 2011) and

literacy rate of 67.63% (census 2011) has Hindi[18]. as SOL, Urdu (ASOL), Oriya, Bangla and Santali were other language recognized till recently. Now few other tribal and regional language are recognized officially including Ho, Kurux, Mundari, Kharia, Bhojpuri, Nagpuria, Panchparganiya, Kurmali and Khortha. Tribes roughly amount for 24% of Jharkhand's population but only 9% approx. reside in urban areas. Jharkhand is linguistically very rich, and it has languages from three major language families present on its soil i.e. Indo Aryan (Hindi, Sadri/Nagpuria, Khortha, Panchparganiya etc.), Austro-Asiatic (Mundari, Kharia, Santali etc.), and Dravidian (Kurux, Malto etc.) and various varieties of these languages. Thus, making Jharkhand a place of intense language contact between tribal and non-tribal languages. As a result of this various languages of wider communication developed. They have been described by G.A. Grierson[19] in his Linguistic Survey of India as varieties of Magahi and Bhojpuri languages spoken in Bihar. Describing eastern Magahi Grierson writes about Kurmali, Sadri Kol, Khortta, and Panchparganiya. He on the basis of structural similarities states that Nagpuria spoken in and around Ranchi is a variety of Bhojpuri-
"We may, therefore state as general facts, that, of the two plateaux in Chota Nagpur Divison, the Aryan language of the Northern, or Hazaribagh plateau is Magahi, and that of the Southern, or Ranchi plateau is a form of Bhojpuri" G.A Grierson (Linguistic Survey of India Vol.5, Part-2).

Another Interesting fact about Jharkhand, again associated with the British rule is that the Lohardagga and Hazaribagh districts of Jharkhand became the first districts of Bihar (Jharkhand was then part of Bihar) to have Hindi with Nagri or Kaithi script as the official language of vernacular education, courts and local administration in 1864[20]. Before that from 1837 to 1864 it was Urdu/Hindustani in Persian script. Thus, we can establish that languages of Jharkhand have been in contact with the standard Hindi-Urdu since 19th century officially.

In the present paper I attempt to discuss the reasons that led to formation of Contact Hindi of Jharkhand (CHJ)and its spread[21]. Next, I will discuss the structure of CHJ and why in my opinion it is a new variety Koiné but different from its neighbor, contact Hindi of Bihar (CHB) in the process of formation as well as structure. It is a new variety that shares many grammatical features with the major regional languages of Bihar and Jharkhand and with Hindi; it also shares grammatical features with the Koinés that developed on indentured plantations like Fiji where laborer speaking different but related languages mainly from U.P and Bihar were taken by the British. CHJ must have developed in the urban centres[22] where exposure, contact and need to communicate with different language speakers were much more than rural setting. Some sentences from CHJ are presented here[23]-

1) *us   ka   gumkain   bola   ki   mətləb*
   (his)3P.SG. of-GEN.M sister in law-F say-PERF.M.SG that meaning
   'his sister-in-law said that meaning?'

---

[18] According to Indian Census 2011 Hindi is the most spoken language of Jharkhand. 2,04,36,026 people out of 2,97,34,312 who speak scheduled languages i.e. 68.7% approx.
[19] G.A Grierson Linguistic Survey of India volume-5 (Part-2)
[20] Kumar. A (2013)
[21] Establishment of TATA industries in 1868 also aided this contact, along with spread of Christianity, mainstream culture, Hindi being the official language for long, positive attitude of speakers towards Hindi and high bilingualism.
[22] S. Chatterji (1969) mentiones calcutta street Hindi used by the Biharis employed in Calcutta. The Koiné contact Hindi of Jharkhand (CHJ) gramatically shares some similarities with it.
[23] The data is from the field work the author did during 2013-14 in Jharkhand.

By some speakers of CHJ not only grammatical but also semantic gender is not marked[24].

2) *i:*   *log*   *ɛse*   *nəhĩ gata*   *hɛ*   *na jəb da:ru*
    this-3P.PROX. people-PL like this   no   sing-IMPF.M.SG be-PRES TAG   when alcohol
    pi   *lega*   *təb gayega*
    drink   take-FUT.M.SG. then sing-FUT.M.SG
    'These people do not sing like this, when they drink alcohol then they sing.'

In the sentences above we can see that with first person singular */həm/* 'I', second person singular */tum/* 'you' and third person plural */i:log/* 'these people' the agreement with verb is in 3. person masculine singular (it is the most common agreement pattern).

3) *ra:t*   *bʰər*   *məccʰər*   *log kata*   *hɛ*   *mere*   *ko*
    night   whole   mosquitoes PL   bite-M.SG be-PRES me-POSS   to
    'Whole night the mosquitoes kept biting me.'

Here we can see that semantic bleaching of */log/* as marker of humanness is taking place in the Hindi of some of the speakers of CHJ, */log/* is taking up the role of just being a plural marker, though it is not a very prevalent practice till know, but when the speakers are not very self-conscious, they do speak like this.

There are many more structural differences and similarities between CHJ, standard Hindi, CHB and Overseas plantation Hindis like Fiji Hindi[25], that I will discuss in the paper. The paper will conclude with a discussion on what could be the possible reasons for the structures that we encounter in CHJ and what are the domains of usage taken up by CHJ.

References
Chatterji, S.K. (1969). *Indo-Aryan and Hindi*. New Delhi: K.V. Sachdeva, Skylark Printers.
Grierson, G.A. (1903-1927): *Linguistic Survey of India, Vol. V, Part-II, Specimens of the Bihari and Oriya Languages*. Calcutta: Government Printing. Reprinted (1990, 1994, and 2005) Delhi: Low Price Publications, Pvt. Ltd.
Hashami, Sabiha (2015): Contact Hindi in Bihar and Jharkhand: Structure and Use. PhD thesis Jawaharlal Nehru University. Unpublished.
Kumar, A. (2013). A Marginalized Voice in the History of Hindi. In *Modern Asian Studies* 47, 5. 1706-1746.
Siegel, J. (1988): Development of Fiji Hindustani. In Jeff Siegel and Richard Barz (eds.). *Language Transplanted: The Development of Overseas Hindi*. 121-149. Wiesbaden: Otto Harrassowitz.
Census of India 2011

[108] *Towards an understanding of hyperpartisanship and aggression on social media* ─ Ritesh Kumar, K.M. Institute of Hindi and Linguistics, Dr. Bhimrao Ambedkar University, Agra

In recent times, we have witnessed an explosion of hyperpatisanship[26] in news as well as in the general conversation on social media. Besides the obvious dangers it poses to the idea of democracy and the culture

---

[24] CHJ varies a lot according to speaker's socio-economic conditions, educational level, age, gender and place of dwelling rural/urban, tribal/non-tribal, religion, these factors were considered during collection and analysis of the data.
[25] Siegel.J (1988:121-149)
[26]   Hyperpartisanship refers to the "blind, prejudiced, or unreasoning allegiance to one party, faction, cause, or person" (https://pan.webis.de/semeval19/semeval19-web/) and generally the opinions on one side of the political spectrum i.e. right-wing or left-wing tend to be hyperpartisan.

of reasonable debates and free speech, it has contributed to two kinds of extremely negative and undesirable consequences – a) it has proved to be a frequent precursor to aggressive, hateful and abusive speech targeted at individuals or groups and b) it has fuelled the spread as well as impact of fake news (Potthast et al 2017), which, in turn, has the potential to turn into tragic incidences[27]. As such, it has become extremely urgent to understand the nature and structure of such news and conversations and also automatically identify and tackle these.

For this study, we have collected and annotated a large corpus of Facebook posts and comments on Facebook pages of three newspapers from each of the three political spectrums – left, right and centrist-liberal - in both English and Hindi. The posts on these pages mostly contain a link to the original news report – these news reports serve as the instances of hyperpartisan news. The comments on these posts are taken as reactions to these news articles. The news items are automatically annotated as being hyperpartisan or not depending on their source / origin – a part of these are manually checked to see to if these annotations were reasonable. The comments are annotated with the information about them being aggressive or not. Both the news items as well as the comments (containing links to other news items) are annotated as being fake or not.

Using this corpus, we studied interrelationship of hyperpartisanship, aggression and fake news and how they feed into each other using quantitative methods. We also carried out a sociopragmatic analysis of the norms and conventions of hyperpartisanship across the news groups supporting different political groups and see if it is realised differently across different groups (contrary to what Potthast et al (2017) claims) and if it evokes different kinds of response from their audience. The results of these studies has ben used in the development of an automatic hyperpartisan and fake news detection system. We will discuss the development of this system in detail in our talk.

References
Potthast, Martin, Johannes Kiesel, Kevin Reinartz, Janek Bevendorff and Benno Stein. 2017. *A Stylometric Inquiry into Hyperpartisan and Fake News*. ArXiv:1702.05631v1.

[109] *Causativisation in Verbal MWEs: A Case Study of Hindi-Urdu* — Md. Tauseef Qamar, Department of Linguistics, AMU, Aligarh, Uttar Pradesh, India; Juhy Yasmeen, Department of Linguistics, AMU, Aligarh, Uttar Pradesh, India.

Multi-word expressions (MWEs) plays a crucial role in any task pertaining to natural language processing. The formation of MWEs is said to be quite varied language to language. Therefore, the nature and forms of MWEs vary in Hindi-Urdu as compared to English and other European languages. Therefore, the existing paper is an attempt to investigate the causativisation in MWEs which have not been covered yet. For example, *pardaa uthaanaa* (to reveal secret) vs *pardaa uthwaanaa* (to cause someone to reveal the secret), *khun khaulna* (to get angry) vs *khun khaulwaanaa* (to cause someone to get angry)'etc., such instances have not received an adequate place in the discussion of MWEs derivation from Machine Translation point of view. Such a phenomenon is very productive in Hindi-Urdu. Such instances are used very frequently in our daily conversation while not encountered with that frequency in standard text. Therefore, most of the employed methods for the classification and extraction of MWEs miss such linguistic properties. Consequently, it becomes very difficult for a machine to unfold such properties used in communication.

---

27   A case in point is here - https://www.bloomberg.com/news/articles/2018-06-20/one-cop-s-fight-against-fake-news-is-saving-lives-in-india

Therefore, in the existing paper, we propose to investigate causativisation and its scope in Hindi-Urdu MWEs using linguistic knowledge. Interpretation and representation for some of these from machine translation perspective have also been explored.

[110] *A Comparative Study of Agreement in Asamiya, Magahi and Sambalpuri* — Projita Giri, School of Languages and Linguistics, Jadavpur University, India

The present research paper will deal with agreement phenomenon in the selected eastern Indo-Aryan languages in India. It will focus exclusively on agreement inside the nominal domain where the referent (noun) and its modifying adjectives agree in terms of various grammatical features like *gender*, *number*, *case* etc. The head noun is often termed as *controller* and the element that agrees with that noun is called the *target* in agreement relation. However, the features possess distinct values for each type. For examples, singular, dual and plural are the values for number. Gender have tripartite distinctions: masculine, feminine and neuter. Interestingly, though such features are universal aspects of language, the assignment of their value is language-dependent. In some languages the grammatical features of the controller are put on the targets invariably. But others behave in different ways. Languages like Sanskrit and Spanish exhibit agreement prominently. Crystal (2008, 6th ed.) defines agreement as "a traditional term used in grammatical theory and description to refer to a formal relationship between elements, whereby a form of one word requires a corresponding form of another (i.e. the forms agree)."

In the full paper, Asamiya, Magahi and Sambalpuri languages of Indo-Aryan family will be selected for the study. The language data will be represented via transcription with the help of International Phonetic Alphabet symbols. Finally, it will help to cater a comparative study with the similarities and divergences among them from a typological perspective. The research objectives of the present paper are as follows:

- *the availability of grammatical features for agreement within nominal domain,*
- *the range of assignment of different values of the those features,*
- *their morphological realisations and*
- *how they differ and resemble cross-linguistically.*

References

Baker, M. C. (2008). *The Syntax of Agreement and Concord*. Cambridge University Press.
Bobaljik J D, Wurmbrand, S. (2005). *The Domain of Agreement*. Natural Language and Linguistic Theory. 23: 809-865.
Crystal, D. (2008). *A Dictionary of Linguistics and Phonetics*. (Sixth ed.). USA: Blackwell Publishing.
Dash, A. K. (1993). *Evolution of Sambalpuri Language and its Morphology*. Ph. D thesis. Sambalpur University, Sambalpur.
Patgiri, D. P. (2004). *Asmiya, Bangla Aru Oriya Bhasa: An Anthology of Comparative Studies in Language*. Guwahati: Banalata.
Wunderlich, D. (2013). *Grammatical Agreement*. International Encyclopedia of Social and Behavioral Sciences. (2nd Edition).

[111] *Converging reciprocal strategies: contact and convergence* — Atanu Saha, Assistant professor, School of languages and linguistics, Jadavpur University, Kolkata, India

The paper probes into the reciprocal constructions (English *each other* type) of the three indigenous languages namely Rava, Toto and Mech of the Tibeto Burman family spoken in India, two Celtic languages Welsh and Breton of the Celtic language family and Blackfoot and Passamaquoddy, of Algonquian family

spoken in Canada and argues that all of these languages diachronically possess a monomorphemic strategy like Bangla pronominal (*pOrospOr* 'each other') or a verbal suffix –*otsiiyi* in Blackfoot. However, currently the languages exhibit a parallel strategy between a compositional strategy as in Hindi (*ek dusre ko*) or French *l'un l'autre* or the monomorphemic strategy mentioned above. In case of Welsh, the reciprocals behave more like English and Breton like French due to intense contact. In this paper, I argue that the reason of expressing reciprocity in a compositional way happens due to language contact and shifting strategies for particular linguistic expressions. In fact in case of data elicitation, I have observed if the questionnaire in source language contains a compositional strategy, the constructions in the target languages yield a compositional pattern. The paper shows various degrees of linguistic convergence e.g. Toto and Rava show complete shifting of strategies from monomorphemic to polymorphic constructions. In case of Mech, while the younger generation prefers the compositional strategy, the monomorphemic strategy is still pervasive among the older generations. In case of Passamaquoddy and Blackfoot, both the strategies are available due contact with French and English and perhaps the languages are going to borrow the compositional strategy in the future. The paper argues that this is a common phenomenon for many related and unrelated languages across the globe.

Bibliography
Bruening, B. (2006). *The Morphosyntax and Semantics of Verbal Reciprocals.* University of Delaware.
LeSourd , P. (2013). *Accent & Syllable Structure in Passamaquoddy.*
Zúñiga, F. (2016). Selected semitransitive constructions in Algonquian. *LINGUA POSNANIENSIS.*
Abbi, A. (2001). *A manual of Linguistic Fieldwork and Structures of Indian Languages.* Lincom Europa.
Benedict, P. K. (1972). *Sino-Tibetan: A Conspectus.* Cambridge: Cambridge University Press. Bhattacharya, P. C. (2007). *A Descriptive Analysis of the Boro Language (2nd ed.).* Guwahati: Gauhati University.
Burling, R. (2003). The Tibeto-Burman Languages of Northeastern India. *The Sino-Tibetan Languages*, 169-191.
Editor. (2018). *India is losing languages. Apart from a cultural loss, the process can also hamper governance.* Retrieved from https://www.hindustantimes.com/editorials/india-is-losing- languages-apart-from-a-cultural-loss-the-process-can-also-hamper-governance/story- Ftw5TzjK7H6rw0k4WPMVFN.html.
Grierson, G. A. (1903). *Tibeto-Burman Family. Vol. III, Part II. Specimens of the Bodo, Naga, and Kachin Groups.* Calcutta: The Linguistic Survey of India.
Karl S. Hele, J. Randolph Valentine. (2014). Introducing companion arguments in Blackfoot. *Papers of the Forty-First Algonquian Conference: Actes du Congrès des* , (pp. 183-84).
Moseley, C. (. (2010). *Atlas of the World's Languages in Danger.* Retrieved from http://www.unesco.org/culture/en/endangeredlanguages/atlas
Office of the Registrar General & Census Commissioner, I. (2018, 11 30). *STATEMENT-1.*
Retrieved 12 6, 2018, from http://censusindia.gov.in: http://censusindia.gov.in/2011Census/Language-2011/Statement-1.pdf
Rottet, K.j, (2010). Language contact in Welsh and Breton: The case of reflexive and reciprocal verbs (2010), edited by J. Clancy Clements, Megan E. Solon, Jason F. Siegel, and B. Devan Steiner, pp. 59–80. Bloomington, IN: IULC Publications.
Simons, G. F. (2018). *Ethnologue: Languages of the World*. Retrieved from http://www.ethnologue.com/.
Subbarao, K. (2012). *South Asian Languages: A Syntactic Typology.* Cambridge.
van Driem, G. (2001). *Languages of the Himalayas: An Ethnolinguistic Handbook of the Greater Himalayan Region: Containing an Introduction to the Symbiotic Theory of Language.* Leiden: Brill.

[112] *A Random Choice indefinite with a twist: Malayalam wh-oo oru* ─ Sarath Chandran Manthodi, EFLU, Hyderabad & Rahul Balusu, EFLU, Hyderabad, India

Introduction: Random Choice (RC) indefinites, existentials that trigger a modal inference of indiscriminate choice, have been investigated quite extensively in some languages, especially Spanish (Alonso-Ovalle & Menendez Benito (AM) 2011, 2013, 2016), where they are shown to be sensitive to certain semantic

constraints, specifically the decision of the event's agent, and the agent's indifference. In this paper we analyse the distribution and interpretation of the Malayalam RC indefinite *wh-oo oru*, thus adding to our understanding of modal selectivity in the nominal domain. We show that *wh-oo oru*, is more free in its distribution than the Spanish equivalent, in allowing for the RC indefinite in an unaccusative, and at the same time, more restrictive, in giving rise only to Speaker Ignorance readings. The agent indifference RC readings are relegated to another existential Free Choice (FC) Item (∃-FCI) in Malayalam, *wh-engilum* (*oru*).

wh-oo oru's Profile: It is fine in an episodic context, agentive, (1), and unaccusative, (2).

(1) njaan eed-oo oru   card eDuthu
     I which-disj one/a   card took
     'I took some card or the other.'
(2) eed-oo   oru bottle poTTi
     which-disj one bottle broke
     Some bottle or the other broke.'

In the above, and episodic sentences in general, *wh-engilum* (*oru*) is bad. On the other hand, *wh-oo oru* is bad in imperatives –orders, (3), or requests, (4). In both kinds of imperatives, *wh-engilum* (*oru*) is good.

(3) *eed-oo   oru pustakam taa!
    which-disj one book   give-must
    'Intended: Give me some book or the other!'
(4) *eed-oo   oru pustakam tann-oolu!
    which-disj   one book   give-may
    'Intended: 'You may please give some book or the other!'
In all other contexts, both *wh-oo oru* and *wh-engilum oru* are fine, showing a clear division of labor, with the former giving rise to a Speaker Ignorance (Spkr Ignr) interpretation and the latter giving rise to an Agent Indifference (Ag Indiff) interpretation. For example, with a bouletic modal, *wh-oo oru* signals ignorance on the part of the Speaker, (5), whereas *wh-engilum oru* signals indifference on the part of the agent, (6).

(5) ravi-kke   eed-oo   oru bomma veenam
     Ravi-dat   which-disj one toy   want
     'Ravi wants some toy or the other.' (Spkr Ignr)
(6) ravi-kke   eed-engil-um (oru) bomma veenam
     Ravi-dat   which-if-conj one   toy   want
     'Ravi wants some toy or the other.' (Ag Indiff)

Our Proposal: Variation over Epistemic worlds: We explain the distribution and meaning of *wh-oo oru* by proposing that it introduce a layer of quantification over possible worlds, and induces a presupposition of variation on epistemic worlds. It triggers a total and equal variation modal presupposition. The event anchor is high leading to an Epistemic Modal Base. The Ordering Source can be Stereotypical, Bouletic, Deontic, or, Teleological. The rest of its properties follow from here.

Let's say the choice Ravi has for (5) are the toys *a, b, c*, in the store. We give it the LF (20a), and model the semantic computation in (20b-d).

(7) a. $\square_{Speaker's\ belief\ worlds}$[[which toy in the store]$_{[+D]i}$ [Ravi wants t$_i$]

b. *Assertion*: $\square_S \exists x \in \{a,b,c\}[\text{want(Ravi, x)}]$

c. *D-alt*: $\square_S \exists x \in \{a\}[\text{want(Ravi, x)}], \square_S \exists x \in \{b\}[\text{want(Ravi, x)}], \square_S \exists x \in \{c\}[\text{want(Ravi, x)}]$

d. *Implicature*: $\square_S \exists x \in \{a,b,c\}[\text{want(Ravi, x)}] \wedge \neg \square_S \exists x \in \{a\}[\text{want(Ravi, x)}]$

   . $\wedge \neg \square_S \exists x \in \{b\}[\text{want(Ravi, x)}] \wedge \neg \square_S \exists x \in \{c\}[\text{want(Ravi, x)}]$

As for (6), we give it the LF (21a), and model the semantic computation in (21b-d). We contend that *wh-engilum oru* makes reference to the preferences of the agent, and that it conveys that the agent is indif- ferent to the options at hand. We cash out indifference in terms of equal desirability of all the alternatives, encoded using a bouletic ordering source in an alternatives and exhaustification approach (Chierchia 2013, Condoravdi 2013).

(8) a. $\square_{Agent}$*'s desire worlds*[[which toy in the store]$_{[+D]i}$ [Ravi wants t$_i$]

e. *Assertion*: $\square_A \exists x \in \{a,b,c\}[\text{want(Ravi, x)}]$

f. *D-alt*: $\square_A \exists x \in \{a\}[\text{want(Ravi, x)}], \square_A \exists x \in \{b\}[\text{want(Ravi, x)}], \square_A \exists x \in \{c\}[\text{want(Ravi, x)}]$

g. *Implicature*: $\square_A \exists x \in \{a,b,c\}[\text{want(Ravi, x)}] \wedge \neg \square_A \exists x \in \{a\}[\text{want(Ravi, x)}]$

   . $\wedge \neg \square_A \exists x \in \{b\}[\text{want(Ravi, x)}] \wedge \neg \square_A \exists x \in \{c\}[\text{want(Ravi, x)}]$

We capture the indifference as an unbiased equi-desirable, equi-probable, bouletic condition (22).

(9) For every two toys, *a*, *b*, and for every alternative *w'* for Ravi in *w*: every world maximally similar to *w'* in which Ravi wants *a* is as desirable to Ravi in *w* as every world maximally similar to *w'* in which Ravi wants *b*.
For a model with three alternatives *a, b, c*, this would rule in only those models with total and equal variation (10), and rule out those with partial variation, or unequal (biased) variation, (11).

(10) w1: a w2: a w3: b w4: b w5: c w6: c (11) w1: a w2: a w3: a w4: b w5: b w6: b
    w1: a w2: b w3: a w4: c w5: b w6: c   w1: a w2: a w3: a w4: c w5: b w6: c

In future tense contexts, (12), *wh-oo oru* is interpreted as a specific unknown, with variation across the Speaker's epistemic worlds; whereas *wh-engilum oru* is interpreted as an indefinite with variation across the circumstantially accessible worlds, (13).

(12) aar-ooor-aal ninnə ezhunelpik-um. (13) aar-engil-um or-aal ninnə ezhunelpik-um.
    who-DISJ one-person you wake-will who-IF-CONJ one-person you wake-will
    'Someone or other will wake you.' (Spkr Ignr) 'Someone or other will wake you.' (Ag Indiff)

In clausemate negation contexts, *wh-oo oru* signals that the Speaker is unaware of the identity of the entity, (14); whereas *wh-engilum oru* signals that there is one such entity that fits the description, (15).

(14) eed-oo oru pustakam vaayicc-iTT-illa (15) eed-engil-um oru pustakam vaayicc-iTT-illa
    which-DISJ one book read-not which-IF-CONJ one book read-not
    '*pro* didn't read some book or other.' (Spkr Ignr) '*pro* didn't read some book or other.' (Ag Indiff)

In other NPI licensing contexts also, *wh-oo oru* signals that the Speaker is unaware of the identity of the entity, (16); whereas *wh-engilum oru* signals that there is one such entity that fits the description, (17).

(16) ravi eed-oo   oru pustakam   vaayiccirun-engil pass aavumaayirunnu
    Ravi which-DISJ one book   read-if   pass have-would
    'If Ravi had read some book or the other he would have passed.' (Spkr Ignr)

(17) ravi eed-engil-um oru pustakam vaayiccirun-engil pass aavumaayirunnu

Ravi which-if-CONJ one book   read-if   pass have-would

'If Ravi had read some book or the other he would have passed.' (Ag Indiff)

With possibility modals, *wh-oo oru* is slightly degraded, (18); whereas *wh-engilum* oru is perfectly fine, (19)

(18) ?eedo   oru guliga   kazhichiTunDavum   (19) eed-engil-um oru guliga   kazhichiTunDavum
       which-DISJ one medicine take-may-have   which-IF-CONJ one medicine take-may-have
       '*pro* may have had some pill or other.' (Spkr Ignr)   '*pro* may have had some pill or other.' (Ag Indiff)

With epistemic and deontic necessity modals, *wh-oo oru* is fine or almost fine, (20)-(21).

(20) (?)eedoo   oru guliga   kazhichiTunDaavanam (21)eed-oo   oru gift konDuvaranam
       which-DISJ one medicine take-must-have   which-DISJ one gift bring-must
       'pro must have had some pill or other.' (Spkr Ignr)   'pro must bring some gift or other.' (Spkr Ignr)

With an ability modal, *wh-oo oru* signals Speaker Ignorance, (22), *wh-engilum oru* signals existential free choice, (23), and *wh-um* signals universal free choice, (24).

(22)ravi-kkə eed-oo   oru vanDi ooDikkaan paTTum
 Ravi   which-DISJ one vehicle drive   can
 'Ravi-DAT is able to drive some vehicle or the other.' (Speaker doesn't know which, but others do)

(23)ravi-kkə eed-engilum   oru vanDi ooDikkaan paTTum
 Ravi-DAT which-IF-CONJ one vehicle drive   can
      'Ravi is able to drive some vehicle or the other.' (Nobody knows, to be found out by trial-and-error)

(24) ravi-kkə eedə vanDi-y-um ooDikkaan paTTum
 Ravi-DAT which vehicle-CONJ drive can
      'Ravi is able to drive any vehicle.' (Ravi can drive all the vehicles in the context)

Conclusion: The existential free choice item *wh-engilum* (*oru*) in Malayalam extends into the RC territory and appears to share the cell with *wh-oo oru*, but it is clear that there is a distinct line between the two, with *wh-oo oru* giving rise to the Speaker Ignorance readings, and *wh-engilum oru* being limited to Agent Indifference readings. The difference between the epistemic indefinite *wh-oo* vs. the RC epistemic indefinite *wh-oo oru* is that the former does not have the variation condition whereas the latter is subject to the variation condition in Malayalam. Malayalam is making nicely fine-grained distinctions demarcated morphologically: ∃ -FCI vs. ∀ -FCI nicely with *wh-engilum* vs. *wh-um* and Epistemic RC vs. Circumstantial RC with *wh-oo oru* vs. *wh-engilum oru*.

[113] *Problematising the Rapid Word Collection Method: A Perspective from the Indian Context* ─ Karthick Narayanan, JNU; Enakshi Nandi, JNU & Bailochan Nayak, JNU

The Rapid Word Collection (RWC) method – developed by Ronald Moe (SIL International) under the Dictionary Development Program (DDP) in East Africa – is predicated upon the assumption that there is a certain universality that characterises semantic domains across languages. It suggests that there are certain things in the world, and in the human experience and their interaction with the world that are universal, and can be found in almost every language across the world in the form of open-class lexical items. This paper

seeks to problematize that premise by looking into the challenges and shortcomings of this method that were encountered by the authors in their attempt to document some Indian languages using this method.

The RWC is a method that aims to partially describe and partially document a language. In the attempt to document unwritten, endangered languages in India, however, one is faced with the challenge of cultural contexts that are not covered by the RWC questionnaire. Many domains, the lexical items within them, and the conceptual relations between the lexical items in a domain fall short of capturing the linguistic competence of the concerned speech community, because they have not anticipated the semantic and conceptual relations between lexical items that are local and specific to the speech community and fall outside the purview of their questionnaire. Coupled with that are the problems of language attrition (due to the dominance of other, written languages in the region that the children are encouraged to learn) and language change (to more code-switched or dominant varieties or languages) that most endangered languages are victim to, which considerably reduce the lexical recall powers of the native speakers of the concerned language, giving rise to the question: Is there anything like an "ideal subject" for language elicitation, and what are the criteria that would decide the eligibility of such a hypothetical candidate? All these concerns give rise to two major questions:

a) Are semantic domains equal to ontology? How does the RWC relate words with each other under the umbrella of a single concept?
b) Is the purported "universality" of the RWC domains, and of the relations between words and concepts, valid?

This paper will thus analyse and attempt to respond to the theoretical questions posed above by taking into account instances from the authors' own fieldworks in India that have faced the challenges mentioned above in the first place.

References

Gärdenfors, P. (2017). Semantic Knowledge, Domains of Meaning and Conceptual Spaces. KNAS, 9. Retrieved from https://link.springer.com/chapter/10.1007/978-3-319-44588-5_12.
Gliozzo, A. (n.d.). SemanticDomainsandLinguisticTheory.
Majid, A., Jordan, F., & Dunn, M. (2015). Semantic Systems in Closely Related Languages. Language Sciences, 1-18.
Moe, R. (2003). Compiling Dictionaries Using Semantic Domains. Lexicos 13, 13th ser., 215-223.
Shore. S, van den Berg. R. 2006. A New Mass Elicitation Technique: The Dictionary Development Program. Paper presented at Tenth International Conference on Austronesian Linguistics. 1720 January 2006. Puerto Princesa City, Palawan, Philippines.
http://www.sil.org/asia/philippines/ical/papers.html

[114] *Linguistic Vitality, Maintenance and shift among Pashto speakers of Jammu and Kashmir* ─ Humaira Khan Dept. of Linguistics, University of Kashmir; Diksha Konwar, Centre for Linguistics Jawaharlal Nehru University

This paper is an attempt to elucidate the linguistic position of 'Pashto' speakers, also known as 'Pakhtoons', residing in Gutlibagh village, of Ganderbal district in the state of Jammu & Kashmir. This mountainous tribal community forms the world's biggest sedimentary lineage ethnic group. They speak an Eastern Iranian classified language, Pashto. The study explicitly aims to analyze the language Proficiency, Acquisition, Prestige and language pReferences of Pakhtoons in J&K. The intended purpose of this study is to draw an apparent picture of how Pashto language and culture of Pakhtoons both together ensured sustenance and longevity while overcoming the odds and inevitable changes, with time. The Pashto community in Gutlibagh functions in three languages, i.e, Pashto, Urdu and Kashmiri. In the present study, we would like to

investigate the linguistic position of Pashto language in relation to Urdu and Kashmiri. In the present study both the participant observant and interview method has been employed in order to collect data. The data for the study was elicited from a set of 100 informants belonging to different gender, age and socio-economic group. In the study, it has been observed that speakers from all age groups speak Pashto the most followed by Urdu and Kashmiri; and the older generation use Pashto maximally. However in case of male speakers, it is quite interesting to note that the middle aged males occupy the lowest rank in terms of the duration of the use of Pashto than old and young speakers. Again, the young females show better proficiency in Kashmiri and Urdu than old females. The use of urdu exceeds Kashmiri among all age groups in both the sexes. Moreover, it should be noted that across the sexes, the comparative loss in the use of Pashto is found in the males and retention is in females. Among all the age groups more loss is found in the middle aged males and the youth. The history of Pakhtoons, has always been intriguing and a matter of research for their resilient and strong character as tribal beings. The reason which makes this study more interesting is that Pakhtoons, today are scattered across a vast area covering Afghanistan, Pakistan and India as well. This study has been carried out specifically on the Pashto community settled in Kashmir region, where Pakhtoons immigrated and settled a long time ago. The place is popularly known as 'Gutli bagh' at present. It is assumed that a large number of Pashto speakers are settled in the Kashmir belt, but it is hard to determine the exact number of speakers of this language. From previous research sources, it can be roughly estimated that there might be around 100,000 speakers living in Kashmir till date. The state of Jammu and Kashmir is known for its linguistic diversity and despite being a small community Pakhtoons, who have witnessed a dynamic linguistic transition still stand tall facing the odds.

[115] *Study of Bhil Languages as a Functional Generative Typology* — Vyom Sharma, Indian Institute of Technology, New Delhi, India

Bhil Languages are spoken by the people of Bhil tribes, who are mainly concentrated in Western India in the states of Rajasthan, Gujarat, Madhya Pradesh and Maharashtra. This group of dialects are in situation of contact or have historical influence from "major" Indo-Aryan Languages yet maintain distinctive identity from them. According to Phillips (2005), BL "displays an amalgam of features incorporated from its surrounding linguistic environment". Linguistic studies on BL from as early as Grierson (1907) till recent studies by Phillips (2005), have all treated BL as a family of distinct languages, rather than treating them as off-shoots or dialects of neighbouring major languages. Syntactic study of lesser known and endangered languages in India has been an ignored field. This paper will see why it is important to fill this void of exploring and studying the syntax of Bhil Languages, the languages of the Bhil tribes. These languages have been studied to provide a functional typology and a sociolinguistic insight but haven't been studied enough to examine their morpho-syntactical properties. This paper will explore the significance of a morpho-syntactic and sematic study of BL.

We will also see why a linguistic study of BL will be important to study of IA languages, which have been approached in various ways by many people, yet it has scope for more elaborative research, and novel approaches. This study aims to supplement to the contributions of previous researches in negation in IA. This paper is an attempt to provide a springboard for future research projects for BL.

One of the main objectives of this paper is to motivate a study of BL as a Formal Generative Typology (FGT) (Baker, 2010) .Our aim under FGT principles, as Baker (2010) has stated, is to follow a methodology of collecting evidence from data of as many distinct languages as possible, such that analysis of the collected data can answer the core questions about the universality of language, as asked and attempted to be answered in linguistic theory. These questions, according to Baker (2010), can be stated as follows:

"(1) *What properties of natural human languages are genuinely universal, inherent to the human species as such?*

(2) *What properties of natural human languages vary from one human language to another?*

(3) *Which aspects of variation are patterned, systematic, and grammatical in nature, and which aspects of variation are random, idiosyncratic, and lexical in nature?"*

One ought to use the variation of data in the language for, say, negation and related phenomena, to come up with answers for these questions. This will require a certain level of abstractness that has to be implemented with the available data, as the theory demands.

The description of the languages under study must be undertaken as explained above, but the theoretical analysis also must adapt itself to be able to uniformly explain variation in multiple languages which are as distinct, genetically unrelated and as geographically distant as possible. Thus, FGT encourages the linguist to take a "The Middle Way" (Baker and McCloskey, 2007). Baker (2010) explains it as *"to do an intermediate amount of linguistic research on an intermediate number of languages"*. But this study will aim at doing "sufficient" amount of theoretical analysis, while covering as many languages as the scope, length and time-period of the study will allow us.

BL dialects are the perfect candidate for a study under FGT, as we will be see from data of at least 3 different dialects of BL, geographically located hundreds of kilometres away from each other, each one in a region with a different majority and official regional language (Hindi, Gujarati and Marathi). Wagdi, which is a major dialect of BL spoken in Dungarpur and Banswara districts of South Rajasthan, and adjoining areas in Udaipur, Gujarat and Madhya Pradesh will be the primary and base BL dialect undertaken for study.

There are many interesting phenomena observed in BL that can serve as a starting point for a research. For example, Phillips (2005) has shown the existence of a dialect-continuum in BL with respect to fluctuating case features. Kherwada Wagdi, spoken in a small town called kherwada in Udaipur, shows optional marking of ergative case on subject, hinting at possible attrition pattern in BL:

1. ram-Ø   keri   kaap-I   [Kherwada Wagdi]
    Ram.SGM mango.F cut-PF.F
    'Ram cut the mango.'

2. ram-e   keri   kap-te   thake   aangari kaapi naak-i
    Ram-ERG mango.FS cut-PTCP be.PTCP finger.F cut   EMPH-PF.F
    'Ram cut his finger while cutting the mango.' [From Phillips, 2005]

Other than this, standard Wagdi has 5 different types of negation markers, used in different contexts.

•*ne*: *ne* is used to expression eventive negation. Example:

3. me   keri   ne/*nake/*nathi   khaa-di
    1SG.ERG mango NEG   eat-PERF
     "I did not eat a mango."

•*nathi*: *nathi* is used to express copular negation. Example:

4. mu   doctor nathi/*ne/*nake
    1SG doctor NEG
    "I am not a doctor."

174

• *nakke*: *nakke* is used for prohibitive mood, but instead of a command it is used to warn or request for future action. Example:

5. aaNaaa kamraa-me nakke/*ne/*nathi jaa-je
    This   room-LOC   NEG   go-SUB
    (in the future) "Do not go inside this room."

• *nak*: *nak* is also used for prohibitive mood, but it expresses a command which has to be immediately followed. Example:

6. aaNaaa kamraa-me nak/*nakke   jaa/jo
    This   room-LOC NEG   go
    "Don't go inside this room!"

• *na: na* is used to express disagreement negation. Other than answering a yes-no question, there is no other context where *na* can be used to express negation. Example:

7 (a). te   keri   khadi   ke?
        2SG.ERG mango eat.PERF q
        "Did you eat the mangoes?"
7 (b). na, me   keri   ne   khadi.
        No 1SG.ERG mango NEG eat.PERF
        "No, I did not eat the mangoes"

Thus, we can see that Wagdi and other dialects of BL have a lot interesting phenomena going which can contribute answering the riddles in Indo Aryan languages that are being studied at present.

[116] *Sparse lexical representation coerces coarticulatory resistance: Ultrasound evidence from Malayalam coronal geminates* — Meghavarshini Krishnaswamy, EFL University, Hyderabad, India; Indranil Dutta, EFL University, Hyderabad- 500007, India

The size of a language's segmental inventory, and resistance towards coarticulation are two contributing factors to acoustic variation in the realisation of speech segments in languages [5, 4, 6]. This acoustic variation can be considered a product of the contrastive and articulatory-motor constraints on a language. Degree of coar-ticulation resistance (DAC) will influence how much coarticulation is spread into and from a segment's neighbourhood. Diffusion seen in the realisation of phonemes will be less in languages with large phoneme inventories. Malayalam, for instance, exhibits several coronal segments, with a three-way contrast in place of articulation involving the tongue-tip (and also the tongue dorsum, in the case of the retroflex), namely dental, alveolar and retroflex [2]. This phonetically dense space makes it interesting to study the relationship between the need to preserve contrast, and the need to overcome articulatory-motor constraints.

These tight coronal contrasts in Malayalam geminates (V1t̪:V2 vs. V1t̲:V2 vs. V1ʈ:V2) are examined in an Ultrasound study of tongue contours to understand the nature of coarticulatory resistance (CR) and aggressiveness. Degree of Articulatory Constraint (DAC) [1, 7] predicts that articulatory complexity (seen, for instance, in retroflex consonants [3]) mitigates the nature of coarticulatory resistance cross-linguistically. The constraints that effect phonetic variability it can be expected that the coronals in Malayalam will exhibit

varying degrees of coarticulation resistance as predicted by the Degree of Articulatory Constraint (DAC) model [7].Findings from our study of Ultrasound tongue contours are contrary to the predictions of the DAC, where the expectation is that the directionality of CR and aggressiveness will be $V\underline{t}:V < V\underline{t}:V < V\underline{t}:V$. We find that the order of CR is $V\underline{t}:V < V\underline{t}:V < V\underline{t}:V$.

Malayalam alveolars are distributionally restrictive compared to the dental and retroflex places of articulation. Alveolars in Malayalam have low neighborhood densities which may indeed govern the coarticulatory resistance and aggressiveness of this place of articulation. We discuss the implications of our findings for DAC and propose that sparse lexical representation coerces coarticulatory resistance in tight coronal place contrasts.

References

R Anthony W Bladon and Ameen Al-Bamerni. Coarticulation resistance in english/l/. *Journal of Phonetics*, 4(2):137–150, 1976.

Sarah N Dart and Paroo Nihalani. The articulation of malayalam coronal stops and nasals. *Journal of the International Phonetic Association*, 29(2):129–142, 1999.

Alexei Kochetov. Alveolar-to-rhotic coarticulation in north american english: A preliminary epg study. In *ICPhS*, pages 1118–1121, 2011.

Sharon Manuel. Cross-language studies: Relating language-particular coar-ticulation patterns to other language-particular facts. *Coarticulation: Theory, data and techniques*, pages 179–198, 1999.

Sharon Y Manuel. The role of contrast in limiting vowel-to-vowel coarticula-tion in different languages. *The Journal of the Acoustical Society of America*, 88(3):1286–1298, 1990.

Daniel Recasens and Aina Espinosa. An articulatory investigation of lingual coarticulatory resistance and aggressiveness for consonants and vowels in cata-lan. *The Journal of the acoustical society of America*, 125(4):2288–2298, 2009.

Daniel Recasens, Maria Dolors Pallarès, and Jordi Fontdevila. A model of lin-gual coarticulation based on articulatory constraints. *The Journal of the Acoustical Society of America*, 102(1):544–561, 1997.

[117] *Actual Motion Expressions in Telugu* ─Viswanath Naidu, Univ. of Gothenburg, Gothenburg, Sweden

The paper discusses the actual motion expressions in Telugu (Dravidian) in the context of Typology of Motion Events (Talmy, 2000) according to which languages are classified as verb-framed (French, Spanish) or satellite-framed (Swedish, English). The categorization is based on whether they express *Path* on the main verb (verb-framed) or on the "satellite" (satellite-framed). However, the typology has been challenged in the literature for (i) lack of clear definitions on the critical concepts, (ii) exclusivity of other spatial expressions of motion such as case markers and nominals, (iii) inter- and intra-variation in languages, (iv) and an inadequate attention to world's under studied languages (Beavers et al., 2010; Imbert, 2012; Slobin, 2017; Naidu et al. 2018).

More recent research (Naidu et al., 2018) showed that Holistic Spatial Semantics (Zlatev, 2003, 2007) provides a theoretical-cum-analytical tool for resolution of the issues mentioned above. Towards that, this paper provides an empirical evidence for echoing why the original typology is inadequate for accounting agglutinating languages such as Telugu and attempts to build a post-Talmian motion event typology. The data discussed in the paper is collected from 30 native speakers of Telugu reside in Hyderabad (India), using 52 video clips depicting different motion situations (e.g. a woman walked out of the house). In the data, it is found that Telugu uses a range of linguistic devices ranging from generic verbs to participles; from case markers to nominal expressions; from reduplicated forms to ideophones for expressing motion events. Further, it is found that semantic concepts spread over a range of linguistic categories (e.g. Path being on

main verb and case marker). In addition, though Hindi and Tamil are regarded as archetypal verb-framed languages (Narasimhan 2003; Pederson, 2006), this paper refutes why such an attempt is troublesome. **(a)** As found in the data, Telugu differs from verb-framed languages in using the generic verbs frequently- for instance, as shown in (1), speakers of Telugu frequently used generic verbs such as *vaccu* 'to come' and *veḷḷu 'to go'* unlike path verbs *rentre* 'enter' by French speakers. **(b)** Further, it differs from verb-framed type in violating the boundary-crossing constraint where verb-framed languages cannot use a manner of motion verbs for expressing a boundary-crossing event (Aske, 1989). This is not the case in Telugu as it can combine a manner verb and a case marker for expressing a boundary-crossing event as illustrated in (2). **(c)** Additionally, Telugu differs from other verb-framed type in using the Dative and Ablative case markers for expressing *Path* extensively as shown in (1) & (2). The empirical evidence appears to suggest that Telugu and such similar agglutinative languages seem to form a case-framed cluster as has been speculated in (Zlatev et al., 2015; Naidu et al., 2018).

(1)

oka	*vyakti*	*tana*	*imṭ-loo-ki*		*veḷḷaaḍu*
one	person	his	house-in(side)-DAT		went

A person went into his house.

(2)

aa	*vyakti*	*loopali*	*numḍi*	*bayaṭi-ki*	*parigeḍutunnaaḍu*
that	person	in(side)	ABL	out-DAT	running

That person is running out of the house

References

Aske, J. (1989). Path predicates in English and Spanish: A closer look. In Annual Meeting of the Berkeley Linguistics Society (Vol. 15, pp. 1-14).

Beavers, J., B. Levin, and S.W. Tham (2010) The typology of motion events revisited, Journal of Linguistics 46, 331-377.

Berthele, R. (2013). Disentangling manner and path: Evidence from varieties of German and Romance. In J. Goschler & A. Stefanowitsch (eds.), Variation and change in the encoding of motion events, 41–55. Amsterdam: John Benjamin.

Imbert, C. (2012). Path: Ways typology has walked through it. Language and Linguistics Compass 6(4). 236–258.

Slobin, D. I. (2017). Typologies and languages use. In I. Ibarretxe-Antuñano (ed.), Motion and space across languages and applications, 419–446. Amsterdam: Benjamins

Talmy, L. (2000). Toward a cognitive semantics: concept structuring system, Vol.1. Cambridge: MIT press.

Viswanatha Naidu, Jordan Zlatev, Vasanta Duggirala, Joost Van De Weijer, Simon Devylder and Johan Blomberg. (2018). Holistic spatial semantics and post-Talmian motion event typology: A case study of Thai and Telugu. Cognitive Semiotics. 11(2).

Zlatev, J. (2003). Holistic spatial semantics of Thai. In E. Casad and G. Palmer (eds.), Cognitive Linguistics and Non-Indo-European Languages, 305-336. Berlin and New York: Mouton De Gruyter.

Zlatev, J. (2007). Spatial semantics. In D. Geeraerts & H. Cuyckens (eds.), The Oxford handbook of cognitive linguistics, 318–350. Oxford: Oxford University Press.

[118] *Two Roads to Transitivization in Hindi Monosyllabic Verbs: Vowel Lowering or Lengthening* ─ Ankita Prasad, IIT, DELHI, India

Hindi has a process of deriving transitive verbs from base intransitive forms. These verb alternations are of two types: one is with the addition of an overt -aa morpheme to create the transitive form (gir-naa 'fall'→gir-aa-naa 'cause to fall)'; the other is without this overt morpheme, with the transitive form being created by

changing the vowel quality. This paper focuses on the second class of the Hindi alternation. In the latter class of verbs, transitives can be derived from intransitive verbs in two ways (data following Bhatt and Embick, 2005):

1) vowel lowering
    ə→a
    a) kət-naa 'be cut'→ kat-naa 'to cut'
    b) ləd̪-naa 'to load'→ lad̪-naa 'to be loaded'

    i→e
    a) ghir-naa 'be surrounded'→ gher-naa 'to surround'
    b) sik-naa 'to be roasted'→ sek-naa 'to roast'

    u→o
    c) juɾ-naa 'to be joined'→ joɾ-naa 'to join'
    d) ruk-naa 'to stop'→ rok-naa 'to be stopped'
2) vowel lengthening
    i→i:
    a) pit-naa 'to be beaten'→pi:t-naa 'to beat'
    b) pis-naa 'to be ground'→pi:s-naa 'to grind'

    u→u:
    c) kut-naa 'to be ground'→ ku:t-naa 'to grind'
    d) lut-naa 'to be robbed'→lu:t-naa 'to rob'

The processes in 1) (a) and (b) applies without exception in all roots that contain [ə], however the fact that there appears to be two strategies to transitivise the verbs with the high vowels [i] and [u] is of interest to us. Since the words belong to the same class of monosyllabic verb roots with similar features, there appears to be no principled explanation based on verb classes, therefore this paper will attempt to analyse and predict this alternation as a phonological one. The first strategy, of vowel lowering applies when the vowel is followed by the following set of sounds [r l ɾ k d]. The second strategy, of vowel lengthening, applies in other contexts, as well as well as with [l] when preceded by [ʧʰ]. Thus, it appears that the contexts where the high vowels are lowered, and the contexts where they are lengthened are exclusive, hence there must be a principled explanation for why some of the vowels are lengthened instead of lowered.

There are a few possible explanations for this phenomenon. One is that the process applies for phonotactic reasons to avoid marked structures. Another possible explanation is that vowel lengthening occurs instead of lowering to avoid producing homophony with other lexical items in the transitive forms. e.g., pit 'to be beaten'→ *pet 'to beat' may be avoided because a noun /pet/ 'stomach' already exists in the lexicon. This paper will look at the distribution of the two processes to explain why an alternative strategy for transitivization exists in Hindi. It will also experimentally investigate native speaker's judgement of which transitivization strategy should be adopted for nonce words with high vowels. The data will be analysed in an optimality theoretic framework to arrive at a theoretical understanding of the alternation that is also able to predict which transitivization strategy, vowel lowering or lengthening, will be adopted by native speakers in which contexts.

References
Anttila, A. (2002). Morphologically conditioned phonological alternations. *Natural Language & Linguistic Theory*, *20*(1), 1-42.

Bhatt, R., & Embick, D. (2003). Causative derivations in Hindi. *Manuscript. The University of Massachusetts at Amherst*.

Prince, A., & Smolensky, P. (2008). *Optimality Theory: Constraint interaction in generative grammar*. John Wiley & Sons.

[119] *The Interaction of Aspect and Valency in Bagri: Ergative/Genitive Subjects* ─ Syopat Duddy, EFL University, Hyderabad, India

In this paper, we shed light on the interaction of aspect and valency in the clausal domain in the backdrop of frameworks couched in the generative tradition. We present data from Bagri, an Indo-Aryan language spoken mainly in the north-western part of India, and show how the interaction between these two give rise to different case assignments to the subjects in sentences.

1. Ergative subjects: Like Hindi, Bagri is also mainly a nominative-accusative language, in which the nominative subject triggers person, number, and gender agreement on the verb-auxiliary complex. However, the language displays split ergativity in the perfective aspect where transitive verbs agree with the object, not the subject. Moreover, the subjects are also marked with ergative case. This is illustrated below in (1-2):

(1) bo: khaɲo: khav   (hai)   (IMPF, Trans)
    he.NOM food-M.SG eat.IMPF.3.SG   be-PRES
    'Ram eats food.'

(2) bəɳ   khaɲo: khayo: (PERF, Trans)
    he-ERG   food-M.SG   eat.PERF.M.SG
    'Ram ate food.

However, unlike Hindi, ergativity in Bagri is not marked morphologically except in 2.SG and 3rd person pronouns. Moreover, if we have an intransitive verb in a sentence, then the subject will always bear nominative case irrespective of the aspectual information encoded in the verbal complex.

2. Genitive subjects: As we know from our discussion so far, subjects in Bagri bear ergative case when a transitive verb is in perfective aspect. However, if the same transitive verb is in perfect aspect, then the subject receives genitive case. This is exemplified below in (3-4).

(3) bin-go   khaɲo: khay-ɲo: hai   (Perfect, Trans)
    he-GEN.M.SG food-M.SG   eat.PERFECT.M.SG be.PRES
    'Ram have eaten food.'

(4) bo: royo-ɲo: hai   (Perfect, Intrans)
    He-NOM cry.PERFECT.M.SG   be.PRES
    'He has cried'

As we can see in (3), the subject receives genitive case when the transitive verb is in perfect aspect. In the perfect aspect, the event being referred to is viewed as already completed at the time of reference. It should not be confused with the perfective aspect, which marks a situation as a single event without internal structure, and does not imply prior occurrence or present relevance as the perfect aspect does. Moreover, in (3), both the subject and the verb agree with the object in terms of its PNG features. In (4), when an intransitive verb is used in perfect aspect, the subject bears nominative case.

Analysis: As we know from our discussion so far, an intransitive verb in imperfective aspect always assigns nominative case to its subject. In case of a transitive verb, assignment of case to the subject differs based on the aspectual information available. This evidence supports our claim that interaction of valency on the verb (transitive/intransitive) and aspect plays a decisive role in case marking to subjects. There is abundant literature available to explain ergativity pattern in Hindi, a closely related language. For Hindi, Udaar, Kaur, and Chandra (2014) propose that there is a double vP structure, where the higher vP is a perfective head with uninterpretable features (minus person), while the lower vP has a complete phi set of uninterpretable features.

A schematic representation of structure is given below in (5).

(5) [TP [v1P [v2P Ext Arg v2] v1] T]

        Phase   Spell-Out Domain
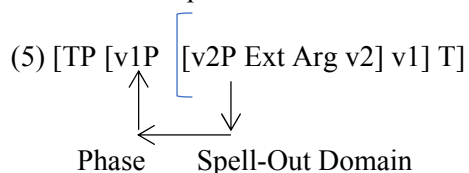
This analysis is based on the mechanism of phase sliding where phase heads can be slided to the next higher head. This sort of head-movement can be thought of as a kind of «upstairs inheritance» with the following consequences: (i) the higher vP becomes the new phase, in the sense of Chomsky (2001) and (ii) the lower v2P becomes the complement to be spelled out. Now, the external argument won't be accessible to the higher C-T head because it is no longer in the left edge or we can say, in other words, that it will be spelled out along with the lower verbal head. Moreover, the newly formed verbal complex v2-v1enters into an agreement relation with the internal argument and values it accusative. The verbal complex cannot agree with the external argument as the DP received a theta-role by the same head. It is thereby assigned an inherent ergative case from the theta-checking v head. The uninterpretable features of C-T are inherited from the feature values of the perfective v1, after the latter (v1-v2) has entered into Agree with the internal argument (and after v2P spell-out). That's why Hindi-Urdu tense auxiliary shows gender-number agreement with the object in ergative subject constructions.

To give a theoretical account for Bagri data, we borrow their idea with some additional changes. In case of genitive subjects, there will be a perfect phrase rather than a perfective one. However, this alone will not help us explain as to why the external argument receives ergative case in one case and genitive case in another, that too inherently. We discuss these issues in greater details in our full paper and present a robust theoretical account of it.

The puzzle of agreement of genitive subject with the object is explained by making some stipulations. We assume that whenever genitive case feature is valued to a DP, it comes with a bundle of uninterpretable phi features that needs to be checked for the derivation to converge. So, it sends a probe deep down its range and finds matching interpretable features on the object DP and gets its features valued via Agree. There are independent motivations to make assumptions that we have made. In our full paper, we discuss all these independent motivations in details.

References
Bloch-Trojnar and Malicka-Kleparska (2017): The interaction of aspect and valency in nominal structures – A theoretical overview; Chomsky (2001): Derivation by phase; Comrie (1976): Aspect; Kachru (1978) On ergativity in selected South Asian languages; Udaar, Kaur, and Chandra (2014): Revisiting morphological ergativity in Hindi-Urdu.

This study examines the effects of grammatical weight (distance and length) and information structure (new/old) in the placement of Hindi finite relative clauses (RCs). Hindi is an SOV language that allows scrambling. Finite RCs can occupy three positions: at the left edge of the main clause, i.e. (1a), at the right edge of the main clause, i.e. (1b); and immediately after the noun phrase it modifies, i.e. (1c). The nature of the discontinuous dependencies in (1a) and (1b) has been a matter of debate in previous studies. Srivastav (1991), for instance, argues that (1a) constitutes a separate relativization strategy, i.e. *correlativization*, based on a set of syntactic and semantic properties of these constructions. She argues that (1a) is base-generated adjoined to IP; whereas (1b) results from rightward extraposition from the embedded position in (1c). Bhatt (2003), however, argues for a unified movement account of both simple constructions in (1a) and (1b), excluding multi-headed RCs (cf. Davison 2009; Dwivedi 2003).

(1) a. *Left-peripheral relative*
     [RC **jo kitāb sel par hai**]   vah kitāb acchī hai
     REL   book sale on be.PRS DEM book good   be.PRS
     'Which book is on sale, that book is good.'

   b. *Right-peripheral relative*
     vah kitāb acchī hai   [RC**jo sel par hai**]
     DEM book good be.PRS REL   sale on   be.PRS
     'That book is good, which is on sale.'

   c. *Adnominal relative*
     vah kitāb [RC **jo sale par hai**]   acchī hai
     DEM book   REL   sale on   be.PRS good be.PRS
     'That book which is on sale is good'   (Bhatt 2003: 288)

Recent functional and psycholinguistic research show that non-syntactic factors intervene in word order variation. Longer and more complex constituents tend to appear later in the sentence to facilitate language production and comprehension (Hawkins 2004; Wasow 1997). For example, rightward extraposition of subject RCs, such as English (2b), is preferred when the RC is longer than the VP (Francis & Michaelis 2016). Similar results regarding grammatical weight, along with information structure, also are reported for RC extraposition in German and Persian (Rasekh-Mahand et al. 2016; Strunk 2014).

(2) a. A letter [RC **which was addressed to Mary**] arrived yesterday.
   b. A letter arrived yesterday [RC **which was addressed to Mary**.]

The present study applies statistical methods to corpus data (2,000 sentences containing RCs) extracted from the EMILLE/CIIL Hindi Monolingual Corpus to investigate how *grammatical weight* and *information structure* interact with *syntactic locality* to determine the position of the RC. A Multinomial Logistic Regression was used as the prediction model (cf. Binary Regression Model in Francis & Michaelis 2016; Strunk 2014). The predictability of the model was also tested by means of a *Confusion matrix* or *Error matrix*, using R.

The results confirmed that several competing factors have an effect in the placement of finite RCs in Hindi. For example*, length*: right-peripheral RCs were longer (11±7 words) than left-peripheral and embedded RCs (9±7 words) (one way ANOVA: $F(4)=11.4$, $p<0.00005$). According to this, Hindi behaves as English in

preferring short-before-long sequences, in contrast with other verb-final languages such as Japanese and Korean which prefer long-before-short (cf. Hawkins 2004). Also, *linear distance*: the (left or right) extraposition distance was larger in left-peripheral RCs (14±12 words) than in right-peripheral (2±2 words) and embedded RCs (0±1 words) (one way ANOVA: $F(4)=138.4$, $p<0.0005$). The larger distance introduces greater processing complexity (Hawkins 2004), which could explain why the demonstrative pronoun is required in left-peripheral (i.e. to pick up the reference). In terms of predicting the structures that speakers will use, the Confusion Matrix showed higher success rate in predicting right-peripheral constructions. It was not successful in distinguishing between left-peripheral and embedded RCs. The possible reasons for this outcome, such as the number of tokens for each construction and the kind of factors considered (only quantitative), are discussed in this study. Also methodological aspects such calculating linear distance are included in the critical discussion.

This study contributes to the debate of Hindi RCs by presenting evidence of non-syntactic factors intervening in the syntactic phenomena of relativization, and by accounting for the different properties associated to the three types of RCs from a non-syntactic perspective. It provides a systematic analysis using corpus data. Furthermore, it shows that the Multinomial Logistic Regression model has the advantage of considering the totality of the independent variables for calculating the risk ratio, emulating a "real life" situation where the speaker has access to all sort of information (syntactic, semantic, processing, etc.). This study also contributes to the larger debate of how different methods can lead to different patterns of results in the investigation of grammatical weight and syntactic locality; in particular how corpus data tend to evidence locality effects (Hawkins 2004; cf. antilocality effects in Kothari 2010).

References

Bhatt, Rajesh. 2003. Locality in correlatives. Natural Language and Linguistic Theory 21.485-541.

Davison, Alice. 2009. Adjunction, features and locality in Sanskrit and Hindi/Urdu correlatives. Correlatives cross-linguistically, ed. by A. Lipták, vi, 375 p. Amsterdam ; Philadelphia: John Benjamins Pub. Co.

Dwivedi, Veena Dhar 2003. The view from the periphery: Hindi reight-adjoined relatives. Paper presented to the Annual Meeting of the Chicago Linguistic Society, 2003.

Francis, Elaine J.; & Laura A. Michaelis. 2016. When Relative Clause Extraposition is the Right Choice, it's Easier. Language and Cognition 9.332-70.

Hawkins, John A. 2004. Efficiency and complexity in grammars Oxford: Oxford University Press.

Kothari, Anubha. 2010. Processing constraints and word order variation in Hindi RCs: Stanford University.

Rasekh-Mahand, Mohammad;, Mojtaba; Alizadeh-Sahraie & Raheleh Izadifar. 2016. A corpus-based analysis of relative clause extraposition in Persian. Ampersand 3.21-31.

Srivastav, Veneeta. 1991. The syntax and semantics of correlatives. Natural Language and Linguistic Theory 9.638-86.

Strunk, Jan. 2014. A statistical model of competing motivations affecting relative clause extraposition in German. Competing Motivations in Grammar Usage, ed. by MacWhinney;, A. Malchukov & E. Moravcsik, 88-106.

Wasow, Thomas. 1997. Remarks on Grammatical Weight. Language Variation and Change 9.81-105.

[121] *Language in the Telangana separatist movement in south India: A tentative construction of pluricentrism* — Anuradha Kanniganti, INALCO, Paris; Chandrapati Rajyarama, University of Hyderabad, India

We examine the case for Telugu pluricentrism, in view of the recent split of the Telugu speaking state of Andhra Pradesh in south India into two state entities. This is a case of a non-dominant variety of an established official language forming the basis of a new identity.

Andhra Pradesh was the first state to be formed on a linguistic basis in newly independent India, uniting three geographically contiguous Telugu speaking regions. While it was an outcome of Telugu linguistic nationalism, this union of regions with distinct historical and cultural consciousness was also contested right from its creation. A long running separatist movement in one of the regions, Telangana, culminated in the formation of a separate state in 2014, rejecting the idea of a shared identity around language.

However, the separatist movement did have a linguistic dimension, relating to the distinctive Telangana dialect of Telugu (identified as the 'Northern' dialect), with important influences of Urdu. The dialect played a key positive role in the separatist movement as its medium of expression, but was also a basis for the movement's claims of discrimination and disparagement - while it is not smaller by number of speakers, the variety has undeniably had a lower symbolic status than the 'Central dialect' on which the Telugu standard had hitherto been based. At the same time, the consciousness of linguistic 'subjugation' was not a primary factor in the separatism which was animated principally by regional economic disparities.

The process of identity construction of Telangana has however resulted in a new linguistic entity being referred to as 'Telangana Telugu'. In our contribution we shall examine the representations and discourses mobilized in the ideological development of this entity. We first contrast the deified figures of *Telugu talli* (Mother Telugu, 1942) and *Telangana Talli* (Mother Telangana, 2003) - the former represented unitary Telugu linguistic nationalism, while the latter was a territorial reference to which language was later appended as a facet of identity and 'state building'. We then examine the different discourses characterizing the phases of emergence of Telangana Telugu: the phase of articulation of grievances against 'subjugation' was followed by a positive construction of the dialect with boundary setting assertions, culminating in linguistic secessionism - the claim that the dialect is a separate language. This logically led to demands for the elaboration of a new written standard to constitute the official language of the new state, for use in education and other domains.

How may we qualify the ongoing attempt to construct a new 'center', on the basis of a variety with distinctions of morpho-syntax and lexicon, but whose literature is predominantly oral? The primary norm-setting center for Telugu continues in effect to be located in the coastal districts of the original unitary Telugu state (the location of the Central dialect), as demonstrated for example in the language of newly minted educational materials for Telangana. It may take a certain time for a sufficient written corpus to be established to serve for the elaboration of a Telangana standard.

We may thus conclude that while there is as an effort to cultivate pluricentrism in the language with the development of 'Telangana Telugu' as Ausbau language, at this stage the claim of a distinct linguistic center reflects more the imperatives of identity construction in these initial years of the new state.

[122] *Positional Faithfulness and Segmental Strength with reference to Pali and Marathi* ― Hemanga Dutta, EFL University, Hyderabad, Telangana, India

It is in debate whether the notion of strength should be characterized as a phonetic or a phonological property (Barnes, 2006). Strength asymmetries can be observed in different phonological processes ranging from aspiration to voicing. Phonological strength can be attributed to certain word positions or prosodic environment (Beckman 1998). This paper tries to focus on repair strategies that the phonology of Indic languages such as Pali, Marathi adopts which fit into the debate between onset/coda asymmetry and positional privilege. There is undoubtedly a correlation between gemination and prosodic position in a phonological domain. In Pali we have seen that gemination is triggered by certain segmental classes and

certain segments undergo the process. More complex segment is a better candidate to be assimilated whereas the less complex segment resists assimilation. Consider the following data:

	Sanskrit	Pali	
1.	uktə (this)	uttə	*ukkə
2.	sərbə (all)	səbbə	*sərrə
3.	atma (soul)	atta	*atma
4.	suklə (bright)	sukkə	*sullə
5.	muljə (price)	mullə	*mujjə

Hence, I propose that Agree CC and IDENT C/_V are higher ranked than Gem Obstruent in Pali when the adjacent segments are of similar sonority value, such as obstruents. But when the segment in the onset is either a liquid or a nasal being preceded by an obstruent in the coda position of the previous syllable, the onset segment assimilates to the preceding coda segment and the ordering of the segment is Agree CC>> *GG>>*LL>>*NN>> Ident C/_V, Geminate Obstruent. Gemination in Pali always occurs even if the only choice is to create a geminate sonorant and in Geminate Sonorant the ranking *GG>>*LL>>*NN is very much functional. Similar arguments against the notion of Positional faithfulness can be substantiated with the examples drawn from Marathi. Segments having greater internal strength are not prone to such alternation; instead they resist and trigger alteration although they occur in the non-privileged positions such as coda and C2 in the syllable. Consider the following examples in Marathi:

6.   /ʈəl̪/ 'fry'+ /le/ 'PERF-NSG' → [ʈəl̪l̪e]'fried'
7.   /məl̪/ 'dirt + /le/ 'PERF-NSG' → [məl̪l̪e] 'became dirty'
8.   /waʈ/ 'think'+ /ʈə/ 'IMPF-3-NSG'] → [waʈʈə] 'I think'
9.   /dɑʈ/ 'scold'+ /ʈɑnɑ/ 'PERF-NON-FIN'] → [dɑʈʈɑnɑ] 'while scolding'

However, it is interesting to note that, there exist a class of segments in the consonant inventory of Marathi which goes against the well-established view of positional privilege and positional faithfulness. The class of segment which shows this phenomenon is retroflex. In the process of retroflexion, the retroflex, in spite of occurring in the coda position resist alteration, do not take on the feature of the following onset rather it triggers the alteration. It can be concluded that segments like retroflexes which are more salient resist assimilation and other less salient segments prone to assimilate irrespective of their position of occurrence. Here, MAX –IO (Retroflex) is higher ranked than MAX –IO (alveolar) and Agree (place).

References
Barnes,J. 2006. *Strength and weakness at the interface: positional neutralization in Phonetics and Phonology*. Mouton de Gruyter.
Beckman, J. N. 1998. *Positional faithfulness (Ph.D dissertation)*. University of Massachusetts, Amherst.

[123] *Syntactic Patterns in Maithili Urdu* ― M J Warsi, Department of Linguistics, Aligarh Muslim University, Aligarh, India

This is, perhaps, the first linguistic study of Maithili Urdu, a dialect of Maithili/Urdu language of Indo-Aryan family, spoken by around four million speakers in Darbhanga, Samastipur, Begusarai, Madhubani, and Muzafarpur districts of Bihar. It has SOV word order and it lacks script and literature. Needless to say, this paper is an attempt to analyse this dialect linguistically so that it should contribute in the field of descriptive linguistics. Besides, it is also spoken by majority of Mithilanchal diaspora community. Maithili

Urdu does not have its own script or literature, yet it has maintain the oral history of over many centuries. It has contributed in enriching the Maithili, Hindi and Urdu language and literature very profoundly.

In Mithilanchal Urdu, four major sentence types are of importance: declarative, interrogative, imperative and exclamative. By "sentence type" is meant a regular correspondence that obtains between a specific syntactic form and a specific semantic function. Thus, a declarative sentence is typically used to make a statement {*yusuf achha ladka hai*}; an interrogative sentence is used to ask a question {*tu kahaan jaa rahlu hai*}; an imperative sentence is used to express an order, a request or a warning {*nai bolu*}; and an exclamative sentence is used to make a more or less emotional comment on something and is often characterized by a grammatically distinctive form {*allah toraa bhalaa kariya!*}. The paper is an attempt to describe the structure of expressions about Maithili Urdu that includes the structure of words, phrases, clauses, and sentences. There are clear differences in linguistic features of Maithili Urdu vis-a-vis Hindi, Urdu and Maithili. Though being a dialect of Maithili/Urdu, interestingly, there is only one second person pronoun *tu* and lack of agentive marker *–ne*. Although, being spoken in the vicinity of Hindi, Urdu and Maithili, it undoubtedly has its own linguistic features, of them, verb conjugation is remarkably unique.

[124] *Writing Urdu in Devanagari: Examining Representation of Urdu on Rekhta* — Rizwan Ahmad, Qatar University, Qatar

Urdu and Hindi are quite similar languages on the spoken level, but they are significantly different from each other in written genres especially literature. One of the major differences between them is the use of different scripts. While Urdu is written in a modified form of Perso-Arabic script, Hindi is written in Devanagari.

Contrary to the established practice of writing Urdu in the traditional Perso-Arabic script, in recent years, Rekhta (https://www.rekhta.org), an organization dedicated to the digitization of Urdu poetry, has produced a vast amount of Urdu literature in Devanagari script. Based on an analysis of data from Rekhta, this paper shows some the orthographic changes that have been introduced to render Urdu in the new garb.

In order to make Devanagari fit into the structure of Urdu poetry, many 'orthographic deviations' have been introduced into Devanagari. The word मेरा is written as मिरा so that meter of the poetry is not broken. Although this word is common between Urdu and Hindi, it is never written as मिरा in Hindi. Another example is the representation of the Urdu letter *ain* ع, which in Urdu has a double function. Sometimes it is used as a vowel and sometimes as a consonant. In some verses they are treated as a vowel and in some others as consonant represented as अ. In other words, the grapheme अ functions as a consonant as well.

In addition to these I also show the use of hyphen to indicate complex Urdu words containing suffixes such as 'ba-' and 'ham-' etc. Sometimes a letter has been preserved in Devanagari although it does not have a phonetic realization (Androutsopoulos 2009). For example the word for wine 'مے' is written in Devanagari as 'मय' rather than 'मै'.

Reference

Androutsopoulos, Jannis K. (2009). **'Greeklish'**: Transliteration practice and discourse in the context of computer-mediated digraphia. In Alexandra Georgakopoulou & Michael Silk (eds.), Standard languages and language standards: Greek, past and present, 221–49. Furnham: Ashgate.

This paper is a study of the lexicon of Sylheti. Sylheti is considered a variety of Eastern Bengali belonging to the Indo-Aryan language family (Grierson 1928, Chatterjee 1971). Sylheti is spoken primarily in southern part of Assam and Tripura in India, and Sylhet District in north-eastern Bangladesh. Sylheti though considered as an Indo-Aryan language, possess many linguistic features that are atypical of Indo-Aryan. This may be attributed to the fact that Sylheti is spoken in a region, where it is in contact with varieties of Tibeto-Burman and Austro-Asiatic languages. Studies on language contact have shown linguistic contact ensuing in various linguistic outcomes. In this paper by undertaking a study of Sylheti lexicon, we try to understand the nature of convergence and diffusion in Sylheti, stemming from language contact. This study is based on large corpus of natural speech data gathered from Assam.

References
Chatterji, Suniti Kumar. (1971). *The Origin and Development of the Bengali Language.* London*:* George Allen and Unwin.
Grierson, George, A. (1928). *Linguistic Survey of India (LSI)*. V (I). Calcutta: Government of India.

[126] *Spatial Deixis in Spiti* ― Anujeema Saikia, Jawaharlal Nehru University, New Delhi, India

The paper aims at exploring, documenting and describing the various means that Piti Bhoti (or a Sino-Tibetan language spoken in the Spiti valley of Himachal Pradesh in India) offers to its speakers for referring to its spatial deictic reference. Of all the various deictic systems that the language employs, the postpositions display a range of diverse behavior. Two particles come together to construct the postpositions in Piti Bhoti. The postpositions predominantly use the locative-directional markers. The following examples could be used to denote the behavior of the particles.

1. sɔkse **taŋ-ne** kore portaŋ duk
   table on cup kept be.PST.PERF
   The cup is kept on the table.
2. kərijul **naŋ-ne** kuʃu duk
   bowl in apple be.PST.PERF
   The apple is in the bowl.

Examples 1 and 2 shows stative locatives, hence, the locative particle remains the same. However, a change in the directional particle can be clearly seen from the above data.

3. ʃu **taŋ-du** stem gip duk
   paper on stamp paste be.PST.PERF
   The stamp is pasted on the paper.
4. tʃaŋmi **taŋ-ru** tʃidu duk
   tree on bird be. PST.PERF
   The bird is on the tree.

Examples 1, 3 and 4 shows a constant directional marker, with the change in its locative forms. The factors that govern these change of forms, with a range of paradigms in the postpositional markers in Piti Bhoti forms the crux of the paper. Elicitation methods and Picture cues were primarily used to collect data.

References

Den Dikken, M (2003). On the syntax of locative and directional adpositional phrases. Ms., CUNY.

Den Dikken, M (2006). On the functional structure of locatives and directional PPs. Paper presented at the Workshop on the internal structure of PP, University of Venice.

Gehrke B. (2006) On directional readings of locative prepositions. In Proceedings of ConSOLE XIV, 99-120.

Koopman, H. (1997). Prepositions, postpositions, circumpositions and particles. UCLA.

Kracht, M. (2002). On the semantics. Linguistics and Philosophy. 25: 157-232.

Nam, S . (2000). A typology of the locatives and event composition in English. Language Research. 36(4): 689-714.

Talmy. L. (1985). Lexicalization patterns. Semantic structure in Lexical Forms. In T. Shopen (ed.), Language Typology and Syntactic Descriptions. Vol 1, Clause Structure, 57-149. Cambridge: Cambridge University Press.

[127] *Lexical Tones in Western Indo Aryan Languages* ─ Devina Krishna, Patna Women's College, Patna, Bihar, India

The general assumption regarding tone in Indo Aryan languages is that lexical tones are found in a highly restricted number of languages, with Punjabi being the best known. The foremost concern in the present work is to give at length an account of tones in western Indo Aryan languages. The present work presents a review of studies of Dogri, Kangri, Punjabi, and Bagri and presents original data to examine the presence and nature of tone in them. The present work will shed light upon the origin, type and complexity of tones in the concerned western IA languages.

As far as Indian subcontinent is concerned, much of the work has been carried on Punjabi that is considered to be the sole language consisting of lexical tones. But the present work proposes that tone may be found in more than Punjabi language. True underlying three-tone systems are also very common, and found in Punjabi (Bhatia, 1993) contrasts three tones on stressed syllables. On unstressed syllables L is not found (Yip, 2002).

The main hypothesis of the present work is as following:

Tone may be found in the western Indo-Aryan languages other than Punjabi.

The ancillary hypothesis of the present work is as following:

Stress and tone are noncompeting prosodic systems in western Indo Aryan Languages. Tone is not reliant on other prosodic occurrence.

Declarative sentences framework has been prepared according to two contexts: prominent and given to evaluate the effectiveness of pitch among the languages.

Tones may interact with stress. Stressed tone bears the tone as in /kŏɽa/ 'horse' in Dogri (Ghai, 1991).

The following are a few examples of lexical tones in Dogri:

- Falling rising as in words such as pĭ 'again', kŏɽa 'horse', etc.
- Mid tone (with different phonetic manifestations) as in words such as pī 'grind', kōɽa 'leper'.
- Low tone as in words such as pì 'drink', kòɽa 'whip'. (Kaul, 2008).

Kangri has one level tone and two contour tones, namely high falling, low rising and level. Even when a word has a contour tone in it, the tone always occurs on the stressed syllable (Eaton, 2008). But earlier no such acoustic investigation of tones in Kangri has been carried out yet. The present study is an attempt to conduct an acoustic investigation of tones.

Kangri has a falling rising tone as in a word such as kŏɽa 'horse', a mid as in a word such as kōɽa 'leper' and a low tone in a word such as kòɽa 'whip'.

The only language that has been termed 'tonal' is Punjabi within the Indian subcontinent. It has three tones: falling, rising and even (Bahl, 1957).The reduction of historical voiced aspiration to tones is generally taken to be single most distinctive feature of Punjabi within Indo-Aryan. The mid tone has been regarded as the normal tone of speaking.

Bagri has phonemic tonal contrasts (Gusain, 2000), yet it is not supplemented with scientific investigation. The following are examples of lexical tones in Bagri:

Low	Mid	High
pèr 'duration'	per 'leg'	pér 'put on'

The previous works created on these languages are basically easy structuralist grammars which are inadequate in range. I want to extend the proposed work using modern phonological theory as well as conducting acoustic phonetic analyses. This is something which was not possible for the prior writers and is possible now as we have software for doing phonetics through computer and the presence of modern phonological theory.

In addition to these, the present work will also present an autosegmental representation of tones in the proposed languages. There are autosegmental representations of the tonal properties; one among them is one- to-many. Here one tone spreads onto many syllables. We can notice such a phenomenon happening in Dogri where the falling tone continues onto the next syllable with a rise in case of disyllables.

In sum, the present paper brings to the readers a descriptive account of lexical tones in western Indo Aryan languages mingled with a scientific angle. The interesting part of the work will be investigating tones in languages other than Punjabi which has been considered as the sole language consisting of lexical tones in the Indian sub-continent.

References
Bahl, K. C. (1957) Tones in Punjabi. *Indian Linguistics*, 17.
Bahri, Ujjal Singh (2001) *Dogri Phonology & Grammatical Sketch*. Bahri Publications.
Bhatia, Tej. K. (1975) The Evolution of Tones in Punjabi. *Studies in the Linguistic Sciences* Vol. 5, Number 2:12-24.
Eaton, Robert D. (2008). *Kangri in context: An areal perspective*; The University of Texas at Arlington.
Fromkin, Victoria (1979) *Tone: A Linguistic Survey*. London: Academic Press, Inc.
Ghai, Ved Kumari (1991) *Studies in Phonetics and Phonology with special reference to Dogri*. Ariana Publishing House, New Delhi.
Gusain, Lakhan (1999) A descriptive Grammar of Bagri. Ph.D. Dissertation, Jawaharlal Nehru University, New Delhi.
Kaul, Devina (2008) The Phonetics and Phonology of Word Prosody in Dogri; M.Phil Dissertation, Jawaharlal Nehru University, New Delhi.
Yip, Moira (2002) *Tone*. Cambridge University Press.

[128] *A Re-examination of Urdu Emphatic Particles: Exclusive Focus Clitic Hi* ─ Riaz Ahmed Mangrio, University of Gujrat, Punjab, Pakistan

Urdu emphatic particles e.g. topic ṯo and focus clitcs *hi* etc- termed as discourse markers by Sharma (2003), require considerable attention. Their main function is to convey emphasis. Within the approach by Fraser (2005) in *Towards a theory of DMs*, the paper focuses on the structural and semantic aspects of exclusive

focus clitic *hi*, and reanalyses the claims that exclusive *hi* is subsumed (Moizuddin, 1989) and incorporated (Sharma, 2003) in some pronouns to develop into their pronominal forms. In contrast, *hi* maintains its individual distinctive status. Sharma (2003:6) takes nasalization as some characteristics of incorporation in the pronominal variations e.g. *həmhiˉ* (we), *ʈʊmhiˉ* (you-plural), *ʊnhiˉ* (they-distance) and *ɪnhiˉ* (they-near) etc. However, this nasalization occurs only in plural forms and is sometimes used in poetical language. The focused forms *həm hi, ʈʊm hi, ʊn hi* and *ɪn hi* are very commonly used to express some emphatic sense, as below:

5. ʈʊm-hi   ho   mehbub   mere

   you.s.m.foc   be.2.obl l   over.m.s.   my.s.m.obl
   '(Only) you are my sweetheart.'

The focus particle distinctively functions as an assertive force here. The singer expresses the intensity of her feelings to her lover that only he is the centre of her love. Note that there is no nasalization in *ʈʊm-hi*, which is specific with some conditions.

Accepting Moizuddin's (1989) claim that **hi** is subsumed means it is harmonised phonetically and morphologically. On the other hand, it can exchange its position with case clitics e.g. ergative, *ne*, dative/accusative *ko*, instrumental /ablative *se* or topic *ʈo*, without affecting the semantics of the sentence. Consider the following.

11. a. ʈʊm/ʈʊdʒʱ-ko-**hi**   match   pəsənd̪   aj*a*.

     you.2. .acc.foc.   match.m.s   like.bse   come.m.s.pst
     'The match was liked by you (only).'

   b. ʈʊm/ʈʊdʒʱ -**hi**-ko   match   pəsənd̪   aj*a*.

     you.2. foc.acc   match.m.s   like.bse   come.m.s.pst
     'The match was liked by you (only).'

The reordering of focus particle *hi* with a case marker in the two examples shows that *hi* is not in fact the part of pronominal form, rather an individual entity. This is why it is breaking away from the pronouns. The semantics of the sentence also remain unchanged.

References
Fraser, B. (1990). An approach to discourse markers. *Journal of Pragmatics*14, 383-95.
Fraser, B. (1996). Pragmatic markers. *Pragmatics* 6(2), 167-90.
Fraser, B. (1999). What are discourse markers? *Journal of Pragmatics* 31(7), 931-53.
Fraser, B. (2006). Towards a theory of discourse markers. In: *Fischer, Kerstin* (Ed.), pp. 189-204.
Moizuddin, M. (1989). *Word Forms in Urdu*. National Language Authority Islamabad. (Submitted as an MPhil Thesis in 1967—University of London) Sharma, D. (2003). Nominal clitics and constructive morphology in Hindi. In M. Butt & T. H. King (Eds.), *Nominals: Inside and Out*, 59–84. Stanford, CA: CSLI.

[129] *Code-switching and code-mixing patterns among Garhwali speakers in North India* ─ Ram Prasad Bhatt, University of Hamburg, Germany

Garhwali is a central Pahari languages that belongs to the Northern zone of Indio-Aryan languages and is spoken by about 2.5 million people but for reasons Garhwali is supposed to be shrinking rapidly. UNESCO's

Atlas of the World's languages in danger has designated Garhwali under the category of endangered languages. It is usually argued that one of the chief reasons for shrinking use of Garhwali is the heavy out-migration. This paper investigates the code-switching (CS) and code-mixing (CM) patterns among Garhwali-Hindi-English trilingual young people and Garhwali-Hindi bilingual elderly people in Uttarakhand. The study identifies the rural-urban and generational differences in CS and CM behavior. The data analysis shows that the younger speakers code-switch and code-mix the languages much more than the older speakers. The CS and CM reflect a new socio-cultural consciousness and identities as well as bridging the social and cultural divide between the traditional and modern viz. urban and rural. The evidences from the field show that not only the out-migration but also the reverse-migration is leading to less use of Garhwali language.

[130] *Teaching Sanskrit to European speakers of the Rromani language* — Marcel Courthiade, INALCO, Paris, France

The close kinship between the Rromani language and Sanskrit is not anymore controversial, and the presentation consists of a survey of the assets which could be brought by Sanskrit teaching to European Rroms. First of all, learning about one's own ethnic name "Rrom", derived from Sanskrit डोम्ब, may reinforce self esteem and therefore psychological comfort and yearning for further study among Rromani pupils. The (re)discovery of the Indian origin of the Rromani people is devoted a short reminder, because it teaches how to understand the use of facts in specific historical contexts. There is currently a trend in various countries to propose in curricula the tuition of a historical form of their language (Old Slavic in several Slavic countries, Ottoman Turkish in Turkey etc.) beside classical Greek and Latin. Sanskrit would be the equivalent for young Rroms – with a specific magnitude, due to the unique heritage it conveys. Such a course should be adapted to the pupils, who already know hundreds of Sanskrit stems through Rromani. The existence of three levels of sandhi in Rromani would also privilege native speakers of this language when learning Sanskrit sandhi, which is an obstacle for many. The similarity of Rromani verbal morphology with that of Sanskrit (or better to say Sauraseni) is also an asset for them (while the morphology of the nominal group is closer to modern Indo-Aryan). The presentation deals with several issues of etymology and cases where the origin is not sharply identifies as Indo-Aryan or Iranian. A series of Sanskrit words brought to a dozen of European local slangs make up an unexpected transcontinental aspect of Indic vocabulary. The comparison is extended to some words common to Rromani and South-East Asian languages because in both cases they originate from Sanskrit.

The conclusion is that such teaching, which corresponds to a real desire of many Rroms, especially in Eastern Europe – albeit currently in decline in the globalizing world, can bring real benefit to European societies, through Rromani classes. It is suggested to include a specific component "Sanskrit language and culture" to the on-line course "Restore the European dimension of Rromani" (www.red-rrom.com).

[131] *Code-switching and code-mixing in the literary works of Intizar Husain* — François Auffret, INALCO, Paris, France

Although code-switching and code-mixing have long been utilized to analyze spoken forms of language, researchers have in recent years begun to exploit their utility in analyzing literary texts as well. Notwithstanding some minor differences between definitions of code-switching and code-mixing – the former being intersentential while the later related to intrasentential mixing of codes – they are said to embody not only linguistic variation, but also the link between linguistic form and language use as social practice. The present paper aims to investigate the phenomenon of code-mixing and code-shifting in some

selected literary works by Intizar Husain – one of the most celebrated Pakistani Urdu writers. Husain's literary career started in 1948, right after the partition and foundation of Pakistan and continued uninterruptedly until his demise in 2016. One of the most remarkable features that distinguishes him from his contemporaries is the language of his literary prose. While most Urdu writers draw upon a form of standardized literary language with little or no variations, Husain introduces a number of innovations in literary writing through mixing of different language registers and codes, a trend which was not considered to fall within the ambit of literary prose by his contemporaries.

Intizar Husain is widely acknowledged as one of the greatest Urdu writers and his writings are highly popular in Pakistan thanks to the use of vibrant language, yet very few Urdu writers have pursued his path. It is not only because of the difficulty of the task in itself, but also because Intizar Husain's early prose depict a linguistic situation of language contact which no longer exists. This language contact pertains to two different registers:

(1) A spoken one. The early prose of Intizar Husain reflects through the numerous dialogs of his characters the use of a rural and idiomatic form of Urdu spoken in his native area of Bulandshehr (a city in present-day Uttar Pradesh in India) and highly influenced by the local dialect of Braj Bhasha, mostly confined to the countryside.

(2) A literary one. Through the different stories, tales and parables embedded in his prose writings, Intizar Husain makes also use of the different formal registers influenced by languages of high culture: Sanskrit, Persian, Arabic and also English, in a quite unique fashion, as we will try to demonstrate.

Throughout his literary writings Intizar Husain has not only revolutionized and revitalized literary language practices, he has also thoroughly documented the complex language practices of the multicultural society of his times and his prose exemplifies the scope and complexities of code switching within the Indo-Pakistani cultural area.

[132] *Importance of Error Analysis for the teaching of Hindi* ─ Shiv Kumar Singh, Faculty of Arts and Humanities, University of Lisbon

A successful teaching and learning process should have a plan to evaluate the success and failure of the learning. One of the ways of evaluation can be through the analysis of the homework of the students of Hindi as a first / second or foreign language. Although the error analysis has become extremely important to foreign and second language teachers lately (Korder 1967, Vazquez 1991), not much research has been done on the analysis of errors in the field of teaching of Hindi as a second or foreign language.

In foreign/second language learning each learner goes through his/her own process of acquisition and at times he or she needs some special attention to improve the process of learning. If the attention is not paid at the early stage of learning, this may lead to the lack of motivation to learn the new language and without motivation nothing can be acquired. By analysing the errors of the students, we do not only understand and improve the acquisition process of the learners, but it helps to understand where the improvement is needed in the teaching process as well.

According to Corder (1967), errors are not always bad, since a systematic and scientific analysis of errors made by students allows us to understand the reasons behind the errors as well as the psychological process of teaching and learning. According to the theory of error analysis, the errors can be related to speaking,

writing and understanding and on the basis of these errors; satisfactory solutions can be found for fast and correct acquisition.

This paper is an attempt to analyse the texts written by students of Hindi as a foreign language in the Faculty of Arts and Humanities at the University of Lisbon starting from A1 to B2 levels (as per the CEFR). The paper will first analyse the results and then propose some suggestions and solutions related to the teaching methods that can enhance the quality and reduce learner's errors. The paper shall show that some of the errors made by the second / foreign language learner are due to interference from his/her mother tongue and the teacher has to have a clear understanding of the structure of the learner's language.

The objective of this paper is to classify different types of errors the Portuguese students of Hindi as a foreign language tend to make as well as to find out the interference of learner's mother-tongue. The data gathered through error analysis will show that it is a good heuristic tool for language teaching.
Some of the examples in this regard are mentioned below:

मेरी माता दो कुत्ते के पास हैं। मैं कुत्ते के पास नहीं हूँ। के बाद बीयर पीता हूँ। बिल्लियों बहुत सुन्दर हैं। मैं पूजा करता नहीं हूँ। पुर्तगाली लोग लिस्बन से घूमते हैं। मेरा काम जाता है।

References
Corder, S.P. (1967). The significance of learner errors. International Review of Applied Linguistics, 5, 161-169.
Singh, Shiv-Kumar & Singh, Dimple-Rajput. 2017. The importance of error analysis in teaching and learning of Hindi as a Foreign Language. Vishwa Hindi Patrika, Vishva Hindi Sachivalay, Mauritius (2016).
Vázquez, G. (1991), Análisis de errores y aprendizaje de español/lengua extranjeira. Análisis, explicácion y terapia de errores transitórios y fosilizables en cursos universitários para hablantes nativos de alemán, Berlín, Peter Lang.
Wenden, A. (1991). Learning Strategies for Learner Autonomy. London, Prentice Hall.
Whong, Melinda. 2011. Language Teaching: Linguistic theory in Practices. Edinburgh University Press

[133] *A typology of conditional clauses – some evidence from Hindi* ─ Ghanshyam Sharma, INALCO, Paris

There are three divergent proposals in syntax which aim to provide a description of conditional clauses. The first one considers an *if*-clause akin to an adverbial clause (Haegeman 2003, 2012), the second establishes a link between conditional and interrogative clauses (Kayne 1991, Cheng and Huang 1996) and the third proposal considers the relation between *if*-clause and *then*-clause similar to the one found between relative and correlative clauses (Dayal 1996). The above mentioned major claims, however, require further investigation for two reasons: first, they are based on data from a limited number of languages only and second, they are theory-oriented and thus provide an account of a conditional clause which can fit into the mechanism of their theories. The paper makes an attempt to critically evaluate these proposals in light of some new facts drawn from Hindi and some other lesser known languages and advances a uniform typology of conditionals clauses. The paper also looks at the pragmatic reasons behind cross-linguistically attested conditional inversion, namely $Q \leftarrow P$, and proposes tools to classify languages according to the absence or presence of marking which can further be sub-classified into obligatory or optional marking. Accordingly, P-clauses and Q-clauses can be both marked (i.e. $^mP \rightarrow {}^mQ$) and unmarked (i.e. $P \rightarrow Q$). Furthermore, there are languages which exhibit obligatory or optional marking of one of the clauses while others do not. Roughly, we can envisage at least four types of conditional constructions, namely, (1) obligatorily marked $P \rightarrow$ obligatorily marked Q, (2) obligatorily marked $P \rightarrow$ optionally marked Q, (3) optionally marked $P \rightarrow$ obligatorily marked Q, (4) unmarked $P \rightarrow$ unmarked Q. The paper makes an attempt to examine the

Greenberg's Universal of Word Order 14: "In conditional statements, the conditional clause precedes the conclusion as the normal order in all languages". (1963)

[134] *Language between norms and variations: some examples from Nepalese consonants* ─ Rajesh Khatiwada, Inalco, Paris

Natural human languages manifest linguistic variations at different levels, for example, segmental (phonetics and phonology), sociolinguistic and pragmatic (De Saussure 1975, Masica 1991, Clements & Khatiwada 2007, 2015). One of the aims of linguists is to determine and illustrate explicitly the mechanisms giving rise to variations without being prescriptive. Linguistic variations are observed in all human languages and should not be considered synonymous with grammatical "errors" (Frei 1929). This work focusses mainly on the phonetic variation of Nepali consonants.

When speakers are questioned about their own pronunciation, it is often observed that the deviant types are not considered as deviant but are considered as standard. Speakers are not conscious about their own bias or deviant forms. In extreme cases, some depreciate their proper pronunciation assuming that it is a wrong pronunciation. Indirectly, the deviant forms induce the idea of a linguistic "norm". However the question arises, what is a linguistic norm (Bandhu & al. 1971)? Are standard and deviant forms observable and measurable? How can we study different forms? We shall try to answer some of these questions by examining "retroflexion" and "aspiration", two important phonological features of the Indo-Aryan languages (Allen 1953), and their phonetic variations.

Different works on Nepalese retroflex consonants have shown the significant articulation variation (Pokharel 1989, Khatiwada 2007, Khatiwada 2014). Examples of the variations found in Nepali corroborate the various retroflex types found in different South Asian languages (Ladefoged & Bhaskararo 1983, Ladefoged & Maddieson 1996). In my previous works I have proposed the "Retroflex" should be taken as a phonological category which subsumes different types of phonetic categories, for example, cacuminal and retroflex (Khatiwada 2014). Taking examples of direct palatography, one of the goals of this presentation is to try to draw a parallel between the phonological categories and their different phonetic realizations and the relation of norm and variations.

Like many Indo-Aryan languages, Nepali stop consonants have a four-way series of laryngeal distinctions – voiceless unaspirates, voiced unaspirates, voiceless aspirates and voiced aspirates (Dahal 1974, Pokharel 1989, Khatiwada 2009). All aspirated stops are robust in initial positions but they tend to deaspirate in intervocalic and postvocalic positions. Contrary to the idea that aspirated forms give an unaspirated counterpart of aspirated consonant, this work claims that during this lenition process (it its original sense: "softening" or "weakening") more than just two phonetic categories, i.e. aspirated and unaspirated, are observed in Nepali. In fact, what we get is a continuum of different phonetics categories.

Based on some examples from experimental phonetics (direct palatography and signal analysis) I will try to justify the above claims and we will advocate the importance of using experimental methods for the study of languages in general and South Asian languages in particular.

References
Allen, W. S. (1953). *Phonetics in Ancient India*. Oxford University Press, London.
Bandhu, C. M., DahalB.M., Holzhausen A. and Hale A. (1971). *Nepali Segmental Phonology*. Katmandou: SIL & T. U. Kirtipur.

Clements, George N. and Khatiwada. R.(2007). Phonetic realization of contrastively aspirated affricates in Nepali. *Proceedings of ICPhS, XVI*, 629–632.

Clements G. N. & Khatiwada R. (2015). Cooccurrence constraints on aspirates in Nepali. Contributions by N.G. Clements and colleagues, A. Rialland, R Ridouane & H. van der Hulst (eds), *Features in phonology and phonetics. Unpublished work from George N. Clements and his colleagues* 127 – 155. Berlin Mouton de Gruyter.

Dahal, B. M. (1974). *A description of Nepali literary and colloquial*. PhD dissertation, University of Poona.

De Saussure, F. (1975). *Cours de linguistique générale*. Payot, Paris.

Frei H. (1929). *La grammaire des fautes*, P. Geuthner, Paris.

Khatiwada, R. (2009). Nepali. *Journal of the International Phonetic Association*, *39*, 3.

Ladefoged, P., & Bhaskararao, P. (1983). Non-quantal aspects of consonant production: a study of retroflex consonants. *Journal of phonetics*, *11*(3), 291–302.

Ladefoged, P and Maddieson, I. (1996). *Sounds of the world's languages*. Oxford: Blackwells.

Masica, C. P. (1991). *The Indo-Aryan languages.* Cambridge: Cambridge University Press.

[135] *Common Lexicon in Urdu and Turkish Language: An Etymological Analysis* ― María Isabel Maldonado García, University of Management and Technology, Lahore, Pakistan

The geopolitical situation of South Asia gave rise to language borrowing through language contact. 150 lexical terms have been identified in Urdu and Turkish languages which share a high level of similarity. These terms were analyzed in order to confirm their origin and exact level of similarity through their lexical distance. Originally it had traditionally been thought that Urdu had borrowed a percentage of its vocabulary from Turkish languages and that the similar terms were in fact loanwords of Turkish. A lexical distance analysis was conducted through the Levenshtein algorithm. It was found that the terms had suffered minimal adaptations once received in Urdu language. The etymological analysis revealed that both Urdu and Turkish languages had received the terms through Persian and Arabic languages and in fact, the terms were not loanwords from Turkish.

[136] *The Grammar of Natural Forces and Natural Processes in Kashmiri.* ― Omkar N. Koul, IILS, Peter E. Hook, University of Virginia & Ashok K. Koul, Brown University

Abstract: Kashmiri has a variety of impersonal constructions which feature bivalent (two-place) or trivalent predicates in the expression of events and processes which correspond in other South Asian languages to monovalent or bivalent predicates. The additional valent is non-referential. Close scrutiny reveals two subtypes differing in semantics and in syntactic behaviour. In describing these two subtypes of impersonal constructions we identify specific syntactic properties distinguishing expressions of natural forces (pertaining to meteorology, physiology, or subjective experience) from those involving natural processes.

SPECIAL SECTION 1 – ELLIPSIS

[137] *No need for zero in bahuvrīhi's constituency analysis. 1. Pāṇini's strategies of subordination and the primacy of syntax in compounding* ― Maria Piera Condotti, Dipartimento di "Civiltà e Forme del Sapere", Università degli Studi di Pisa & Tiziana Pontillo, Dipartimento di "Filologia, Letteratura e Linguistica", Università degli Studi di Cagliari

In modern linguistics it is quite common to analyse bahuvrīhi as derived from an endocentric compound to which a phonetically null suffix has applied, so as to convert it into an exocentric compound. Whitney (1889: 501-502) already postulated a zero morpheme conveying the meaning of 'having' in bahuvrīhis (cf. Bopp 1827: 357). Such an analysis has been re-proposed many times, e.g. by Marchand (1967 [1974]: 335) who wrote of an assumed "actual morpheme without phonetic content (i.e. a zero morpheme)" [which] "performs the function of shifting the reference away from the actual head of a bahuvrīhi compound". For example, he considers *birdbrain* as a sort of metonymy denoting "(a silly person) who has a *birdbrain*", contrasting it with the overt morpheme *-ed* conveying the possessive meaning (Marchand 1967: 368):

[[*bird*+*brain*]+Ø] ≈ [[*pig*+*tail*]+-*ed*] and eventually he terms it as a "derivation", i.e. a "pseudo-compound" (Marchand 1969: 13-14). Today, a number of linguists would even argue that the possessive interpretation of these compounds arises via a metonymic shift in meaning (see e.g. Fleischer and Barz 2012: 179), thus refraining from describing the phenomenon in linguistic terms. And even though the postulation of several types of zeroing remains crucial in modern approaches (cf. for Sanskrit Gillon 2008: 2), one observes a remarkable blur on the unit to be zeroed. In fact, on the one hand, for instance, Kiparsky (1982: 139) assumes that "Exocentric compounds must […] be assigned zero derivational suffixes since they otherwise would share the properties of their heads, i.e. be endocentric". On the other hand, Štekauer 1998 starts from "the formation of an auxiliary, onomasiologically complete syntagm ― with both the base and the mark included", and then focuses on the so-called "shortening" of word forms, which in the case of exocentric compounds consists in cancelling the head of the compounds, such as the word *man* in the compound *red-skin,* where the complete auxiliary syntagm is *red*+*skin*+*man*. All these models adopt a morphological device that is suitable for subordinating the nominal compound to another noun, i.e. they look for a (phonetically null) head in order to level out the endocentric compounds with exocentric ones.

By contrast, despite his extensive use of zero devices, Pāṇini does not adopt any of them to explain bahuvrīhi compounds: the reasons behind this choice and its outcomes are our core concern in this communication. Pāṇini's architecture of the word-formation-rules is based on a variationist pattern which teaches the alternative use of a syntagm and of a matching compound or of a derivative word. Moreover, the most striking feature of Pāṇini's handling of compound analysis is the fact that he does not focus on the head, but rather on the so-called *upasarjana* constituent. The latter is recognisable in the equivalent syntagm, on account of its frozen syntactic relation with another constituent. In other words, the *upasarjana* is the subordinate constituent, inasmuch as it has no syntactic valency outside the compounded stem, because its 'activity' is exhausted within the syntagm: it thus becomes a purely lexical subordinate constituent (cf. in a fully lexicalist framework, Lowe 2015: 91).

In particular, for bahuvrīhi*,* Pāṇini establishes that the lexical material is entirely made up of subordinate members and that a fixed ending explains the relation between the merger of two compound-internal constituents and the head, which is outside the compound.

anena	*ūḍho*	*rathaḥ*
PRON.INSTR.M.SG.PAST.PART.	NOM.M.SG.	NOM. M.SG.

by this		drawn	the chariot

[saḥ] (e.g. *anadvān* 'the ox') *ūḍharathaḥ*

PRON. NOM. M. SG. drawn chariot NOM.

It (e.g. the ox) by which the chariot is drawn

asya *putrāḥ* *rājānaḥ*

PRON. GEN. M. SG. NOM. M. PL. NOM. M. PL.

Of him sons kings

saḥ] (e.g. *devadattaḥ*) *rāja-pūtraḥ*

NOM. king-son NOM.M.SG.

He (e.g. Devadatta) **of** kingly sons

And this, in our opinion, is the crucial point, since the whole compound is blocked in this frozen syntactic relationship with another expressed or non-expressed noun in the sentence with which it syntactically agrees. Significantly this theoretic frame relativises the importance of the opposition between endocentric and exocentric formations (cf. Bisetto & Scalise 2009), while it excises the problem of supplying morphological material to be zeroed.

References

BENFEY, T. (1852). *Vollständige Grammatik der Sanskritsprache*. Zum Gebrauch für Vorlesungen und zum Selbststudium. Leipzig: Brockhaus.

BIANCHI, V. (1999). *Consequences of Antisymmetry: Headed relative clauses*. Berlin: Mouton De Gruyter.

BIANCHI, V. (2000). "The raising analysis of relative clauses: A reply to Borsley" Linguistic Inquiry 31, 123-140.

BISETTO A. and S. SCALISE (2012). "The Classification of Compounds" in R. LIEBER and P. ŠTEKAUER (2012 *eds.*) *The Oxford Handbook of Compounding*, Oxford University Press, Oxford, 34-53.

BOPP, F. (1827). *Ausführliches Lehrgebäude der Sanskrita Sprache*. Berlin: Dümmler.

DEN DIKKEN, M. (1998). "Predicate inversion in DP," in A. ALEXIADOU and C. WILDER, *Possessors, Predicates and Movement in the determiner phrase*, Amsterdam: John Benjamins, 177-214.

FLEISCHER, W. and BARZ, I. (2012). *Wortbildung der deutschen Gegewartssprache*. Berlin-Boston: Walter de Gruyter.

GILLON, B. (2008). *Exocentric Compounds in Classical Sanskrit,* in G. HUET and A. KULKARNI (eds), *First International Sanskrit Computational Linguistics Symposium*, Oct 2007, Rocquencourt, France. http://hal.inria.fr/SANSKRIT/fr/. <inria-00202860>

KAYNE, R. (1994). *The antisymmetry of syntax*. Cambridge, Mass.: MIT Press.

KIPARSKY, P. (1982b). "Cyclic Phonology to Lexical phonology," IN H. HULST and N. SMITH (*eds.*), *The Structure of Phonological Representation*, Vol. 1. Dordrectht: Foris, 131-175.

LOWE, J. J. (2015). "The syntax of Sanskrit compounds" *Language* 91, 3,71-114.

MARCHAND, H. (1967). "Expansion, transposition, and derivation," in D. KASTOVSKY (ed.) Studies in Syntax and Word-Formation. Selected articles by H. Marchand. Münchener: Fink, 322-337.

MARCHAND, H. (1969). *The Categories and Types of present-day English word-formation*.ŠTEKAUER, P. (1998). *An Onomasiological Theory of English Word-Formation*. Amsterdam – Philadelphia: John Benjamins.

ŠTEKAUER, P. (1998). *An Onomasiological Theory of English Word-Formation*. Amsterdam – Philadelphia: John Benjamins.

WHITNEY, W.D. (1889[2]). *A Sanskrit Grammar, including both the Classical language, and the older Dialects, of Veda and Brahmana*, Harvard University, Cambridge, Mass. Repr. (1924) Leipzig: Breitkopp & Härtel.

[138] *No need for zero in bahuvrīhi's constituency analysis 2. The raising analysis of bahuvrīhi compounds: constraints on the position of the extraction site of the head* ― Davide Mocci, University of Siena, Italy.

In the first part of this contribution we have addressed the issue of how Pāṇini's variationist pattern, which replaces a syntagm with a matching compound formation, works in the analysis of bahuvrīhis. This second

part is an attempt to implement these facets of Pāṇini's analysis of bahuvrīhis, in the modern theoretical framework of generative grammar.

To start with, the source-phrase of a bahuvrīhi compound will be represented as a small clause. For instance, given the bahuvrīhi *rājaputraḥ*, its source-phrase will be the small clause [SC [devadattasya putrāḥ] [rājānaḥ]] ("Devadatta's sons are kingly"), or also [SC [rājānaḥ putrāḥ] [devadattāya]] (lit. "kingly sons are to Devadatta"); in what follows, we uniformly adopt the latter. Then, we take the small clause (representing the bahuvrīhi's source-phrase) as being projected as the complement to the functional head D^0. It thus becomes possible to conceive of the mechanism whereby the head of a bahuvrīhi ends up out of the compound after substitution has applied, as an instance of the raising of a constituent (e.g. *devadattāya* occurring in [SC [rājānaḥ putrāḥ] [devadattāya]]) from the complement of D^0 (i.e. from the small clause [SC [rājānaḥ putrāḥ] [devadattāya]]) to the specifier of D^0.

This strategy thus applies the raising analysis of relative clauses (advanced by Kayne 1994 and further developed by Bianchi 1999; 2000) to the nominal domain: under this perspective, bahuvrīhi compounds and relative clauses are generated via the same syntactic mechanisms (namely, the raising of a constituent – labelled as 'head' – from a sentence projected as the complement of a functional head, to the specifier position of that functional head itself), and they only differ in that bahuvrīhis are DPs, while relative clauses are CPs.

After outlining this modern implementation of Pāṇini's proposal, we shall focus on the position of the extraction site of the bahuvrīhi's head. We propose the following generalisation:

(1) The constituent that raises to Spec,DP in the derivation of a bahuvrīhi compound (i.e., the constituent that will be labelled as 'head' of the bahuvrīhi, after raising has taken place) can never be the subject of the small clause representing the source-phrase of the *bahuvrīhi* itself.

The generalisation in (1) is essentially a less intuitive formulation of the observation (made e.g. by Benfey 1852: 273) that the *vigraha* of a bahuvrīhi compound cannot include a relative pronoun inflected in the nominative case. (1) allows us to correctly predict that e.g. *vīraseno devadattaḥ* ("Devadatta, whose army is of heroes") cannot mean "Devadatta, who is in an army of heroes", because such a meaning requires that *devadattaḥ* be raised from the subject position of the small clause [SC [devadattaḥ] [vīrānām senāyām]] ("Devadatta is in an army of heroes"), an operation that is banned from the derivation of bahuvrīhis by the generalisation in (1). (2) illustrates this operation (we omit sandhi in the derivations):

(2) [SC [devadattaḥ] [vīrānām senāyām]] > devadattaḥ$_i$ [SC [t$_i$] [vīrānām senāyām]] > devadattaḥ [vīra-senaḥ]

We shall eventually examine the so-called qualitative genitive construction (e.g. *rājñām putrānām devadattaḥ*, "Devadatta is of kingly sons"), which seems to contradict our generalisation on the localisation of the extraction site of the bahuvrīhi's head. In fact, the derivation of *rāja-pūtro devadattaḥ* from *rājñām putrānām devadattaḥ* seems to be valid, in that it perfectly preserves the possessive meaning of the output formation, but it does involve the raising of the bahuvrīhi's head from the subject position of the small clause [SC [devadattaḥ] [rājñām putrānām]], as shown in (3):

(3) [SC [devadattaḥ] [rājñām putrānām]] > devadattaḥ$_i$ [SC [t$_i$] [rājñām putrānām]] > devadattaḥ [rāja-putraḥ]

We will solve this problem by showing that the qualitative genitive is a 'derived' construction (cf. Den Dikken's 1998 analysis of possessive constructions), and that it thus opposes to cases such as the locative — see (2), which are instead 'primitive' cases (or, at least, 'more primitive' than the qualitative genitive). More specifically, we maintain that, in a small clause such as [$_{SC}$ [devadattaḥ] [rājñām putrānām]], where *devadattaḥ* appears as the subject and the qualitative genitive *rājñām putrānām* as its predicate, *devadattaḥ* was indeed generated in another, lower small clause, where – crucially – it did not perform the syntactic function of subject. Then, after some intermediate steps of derivation, this constituent has ended up within the higher small clause (i.e. [$_{SC}$ [devadattaḥ] [rājñām putrānām]]), where it is actually the subject of the qualitative genitive.

In this way, a bahuvrīhi can be derived via the raising of *devadattaḥ* to Spec,DP in (3), because although *devadattaḥ* performs the function of subject of the small clause [$_{SC}$ [devadattaḥ] [rājñām putrānām]], it has already undergone raising (in a preceding step of the derivation) from a non-subject position contained in another small clause, as illustrated in (4):

(4) [$_{SC1}$ [rājānaḥ putrāḥ] [devadattāya]] > devadattaḥ$_i$ [$_{SC1}$ [rājānaḥ putrāḥ] [t$_i$]] > devadattaḥ [rājñām putrānām] > [$_{SC2}$ [devadattaḥ] [rājñām putrānām]] > devadattaḥ$_i$ [$_{SC2}$ [t$_i$] [rājñām putrānām]] > devadattaḥ [rāja-putraḥ]

Therefore, *devadattaḥ* appears as the subject of the small clause [$_{SC}$ [devadattaḥ] [rājñām putrānām]], ("Devadatta is of kingly sons") in (3), but was indeed generated as the predicate of the underlying small clause [$_{SC1}$ [rājānaḥ putrāḥ] [devadattāya]] ("kingly sons are to Devadatta"). In this way, no violation of the ban on the raising of the small clause subject is found in the derivation of bahuvrīhis from linguistic strings involving the qualitative genitive.

References

BENFEY, T. (1852). *Vollständige Grammatik der Sanskritsprache.* Zum Gebrauch für Vorlesungen und zum Selbststudium. Leipzig: Brockhaus.

BIANCHI, V. (1999). *Consequences of Antisymmetry: Headed relative clauses*. Berlin: Mouton De Gruyter.

BIANCHI, V. (2000). "The raising analysis of relative clauses: A reply to Borsley" Linguistic Inquiry 31, 123-140.

BISETTO A. and S. SCALISE (2012). "The Classification of Compounds" in R. LIEBER and P. ŠTEKAUER (2012 *eds*.) *The Oxford Handbook of Compounding*, Oxford University Press, Oxford, 34-53.

BOPP, F. (1827). *Ausführliches Lehrgebäude der Sanskrita Sprache*. Berlin: Dümmler.

DEN DIKKEN, M. (1998). "Predicate inversion in DP," in A. ALEXIADOU and C. WILDER, *Possessors, Predicates and Movement in the determiner phrase*, Amsterdam: John Benjamins, 177-214.

FLEISCHER, W. and BARZ, I. (2012). *Wortbildung der deutschen Gegewartssprache.* Berlin-Boston: Walter de Gruyter.

GILLON, B. (2008). *Exocentric Compounds in Classical Sanskrit,* in G. HUET and A. KULKARNI (eds), *First International Sanskrit Computational Linguistics Symposium*, Oct 2007, Rocquencourt, France. http://hal.inria.fr/SANSKRIT/fr/. <inria-00202860>

KAYNE, R. (1994). *The antisymmetry of syntax*. Cambridge, Mass.: MIT Press.

KIPARSKY, P. (1982b). "Cyclic Phonology to Lexical phonology," IN H. HULST and N. SMITH (*eds.*), *The Structure of Phonological Representation*, Vol. 1. Dordrecht: Foris, 131-175.

LOWE, J. J. (2015). "The syntax of Sanskrit compounds" *Language* 91, 3,71-114.

MARCHAND, H. (1967). "Expansion, transposition, and derivation," in D. KASTOVSKY (ed.) Studies in Syntax and Word-Formation. Selected articles by H. Marchand. Münchener: Fink, 322-337.

MARCHAND, H. (1969). *The Categories and Types of present-day English word-formation*.ŠTEKAUER, P. (1998). *An Onomasiological Theory of English Word-Formation*. Amsterdam – Philadelphia: John Benjamins.

WHITNEY, W.D. (1889[2]). *A Sanskrit Grammar, including both the Classical language, and the older Dialects, of Veda and Brahmana*, Harvard University, Cambridge, Mass. Repr. (1924) Leipzig: Breitkopp & Härtel.

[139] *The Semantics of Elliptical Constructions in the Syntax of Urdu Language Twitter Corpus* —
Khalid Mahmood, International Islamic University, Islamabad, Pakistan

In theoretical linguistics, elliptical construction is the omission of a word, sentence, or whole section from a text that is usually understood from the contextual clues and usually ellipsis occurs with an antecedent in the discourse. This research investigates the linguistic representation of ellipsis in the language of social media, twitter corpus of Urdu language tweets got through Twitter API. Urdu is lingua franca of Pakistan and is spoken and understood in almost whole of South Asia with 67 million native speakers and 250 million L2 speakers of Urdu in Pakistan and India. The mechanism of ellipsis has been studied by many linguistics (including Johnson, 2001; Chomsky, 1995; Heim, 1996; Prust et al, 1994; Schwarz, 2000; Longobardi, 1994 and Elbourne, 2001) in various perspectives of elliptical constructions.

A specialised corpus of 10,000 unique Urdu language tweets is compiled specifically for this research using Python library 'Tweepy' with a search word "پاکستان" to observe the phenomena of elliptical construction in the syntax of Urdu tweets. The unique tweets mean all the re-tweets (with RT #user_name) were deleted from the corpus to retain the original tweets without any repetition to observe the actual frequency and distinct syntactic patterns of different elliptical construction in the corpus.

Ever since computers were introduced in linguistic analysis, computational linguistics and corpus linguistics have been linked in multiple ways. In computational linguistics and corpus linguistics, techniques have been developed for structuring, annotating and searching large amounts of text. Hence, this study employs a corpus-based approach for quantitative data analyses of Urdu Tweet Corpus, comprising frequency counts, collocations and concordances of the elliptical constructions to find out their true semantics. The raw twitter corpus was grammatically tagged (POS tagged) and semantically tagged from WMatrix, web platform for grammatical and semantic annotation of data.

For the quantitative analysis of Urdu tweet corpus, 'Sketch Engine' and 'WordSmith Tools' were used. The analysis of Urdu twitter corpus revealed the impact of how corpus tools can extract new critical angles and dimensions in the syntactic and semantic linguistic features of the data. The findings help us in the identification of the linguistic practices in making and remaking of syntax and adding more semantics with economy of words while observing ellipsis with its typology i.e. sluicing, gapping, verb phrase ellipsis and noun phrase ellipsis etc. in the language of social media, in this case that of Twitter.

References

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
Elbourne, Paul. 2001. E-type anaphora as NP-deletion. *Natural Language Semantics* 9(3), 241–288.
Heim, Irene. 1996. *Lecture notes on ellipsis*. Lecture notes, MIT.
Johnson, Kyle. 2001. What VP ellipsis can do, and what it can't, but not why. In Mark Baltin and Chris Collins, eds., *The Handbook of Contemporary Syntactic Theory*, 439–479. Oxford: Blackwell.
Longobardi, Giuseppe. 1994. Reference and proper names: a theory of N-movement in syntax and logical form. *Linguistic Inquiry* 25, 609–665.
Prust, Hub, Remko Scha and Martin van den Berg. 1994. Discourse grammar ¨ and verb phrase anaphora. *Linguistics and Philosophy* 17: 261–327.
Schwarz, Bernhard. 2000. *Topics in ellipsis*. PhD dissertation, University of Massachusetts at Amherst.

This paper addresses restrictions on IP ellipsis in Hindi and proposes a polarity-based licensing requirement for it. I attempt a comparison between verbal ellipsis, sluicing and polarity answers in which IP ellipsis is attested in Hindi and argue for a unified licensing condition across these seemingly different phenomena. The most general case of IP ellipsis attested across languages is in sluicing constructions. Hindi despite being a wh in-situ language regularly exhibits sluicing patterns wherein the wh of a sluiced clause is left stranded alongwith the antecedent clause which contains the indefinite the wh refers to, as can be seen in (**Error! Reference source not found.**). A popular analysis is that such constructions are derived by movement of the wh phrase to a higher position in the C domain followed by IP ellipsis of the sluiced clause (Merchant 2001).

1. raaghav-ne   koi   kitab paDhii   par mujhe nahi pataa kaunsi
   raaghav-ERG   some book read.PST.3FSg but I   not know   which
   'Raghav read some book but I don't know which.'

Bhattacharya & Simpson (2012), Manetta (2013) and Gribanova and Manetta (2016) have argued for an IP ellipsis analysis for Hindi based on evidence from case connectivity, deletion of auxiliary and deletion of IP level adverbs. However, I propose that there is one more condition required for sluicing constructions to be grammatical. The relevant observation is that sluicing is unacceptable in constructions where the polarity of the antecedent and the sluiced clause is not contrastive as can be seen from comparing (**Error! Reference source not found.**) and (**Error! Reference source not found.**). In (**Error! Reference source not found.**) the construction would be considered unacceptable if the verb in the 'sluiced clause' is omitted. It would be acceptable only if the verb is present in which case it would be a verb stranding *v*P ellipsis instead of IP ellipsis/sluicing construction. (**Error! Reference source not found.**) is similar to (**Error! Reference source not found.**) in all respects apart from the non-contrastive polarity of the 'sluiced clause'.

2. raaghav-ne   koi   kitab paDhii   aur tanu-ko   pataa hai   ki
   raaghav-ERG some book   read.PST.3FSg and Tanu-ACC   know AUX   that
   kaunsi *(paDhii)
   which   read.PST.3FSg
   'Raghav read some book and Tanu knows which.'

I argue that this requirement of contrastive polarity is not a condition on sluicing per se but a licensing requirement for IP ellipsis in general. I present further evidence from verbal ellipsis patterns in Hindi. Verbal ellipsis in general is of the verb stranding *v*P ellipsis kind as can be seen in (**Error! Reference source not found.**).

3. raaghav kitaab acche-se paDh   rahaa   thaa,
   raaghav book   well   read   PROG.3MSg AUX.PST.3MSg
   'Raghav was reading a book properly.'
   aur rohit bhi *(paDh rahaa   thaa)
   and rohit also   read   PROG.3MSg AUX.PST.3MSg
   'Rohit was too (reading the book properly).'

Bhatt & Dayal (2007), Simpson et al (2013), Manetta (to appear) have argued for a structure wherein the verb raises out of the V+*v* complex followed by deletion of *v*P. However, Hindi does attest a different kind of verbal ellipsis wherein all the verbal elements are also deleted suggesting it to be ellipsis of a higher constituent, specifically IP ellipsis as can be seen by the deletion of the auxiliary. The only situation in

which IP ellipsis is possible is in cases where polarity is contrastively focused as illustrated in (**Error! Reference source not found.**).

4. *raaghav kitaab acche-se paDh rahaa   thaa,*
    raaghav book well   read PROG.3MSg AUX.PST.3MSg
    'Raghav was reading a book properly.'
    magar rohit nahi[e]
    but   rohit neg
    'Rohit was not (reading the book properly).'

In (**Error! Reference source not found.**) the elided clause needs to have a contrastive polarity value when compared to the antecedent clause and only then deletion of the entire verbal sequence is licensed. As we can observe in (**Error! Reference source not found.**), a non-contrastive polarity would not lead to the deletion of the verbal sequence. Thus far we have two such situations in which IP ellipsis is possible only when contrastive polarity is attested between the elided clause and the antecedent clause. One other potential structure which exhibits IP ellipsis is polarity answers to yes/no questions. Holmberg (2015) has argued that answers to yes/no questions are complete clauses having undergone ellipsis so that we overtly get fragments as answers. Even polarity particles as yes/no answers are derived from ellipsis of a complete clause, i.e. IP ellipsis. Contrastive polarity in question answer pairs is established between the disjunctive alternatives available as answers to the yes/no question. The answer to a yes/no question would either be 'yes' or be the opposite polarity 'no'. I argue the same for polarity particles as answers to Hindi yes/no questions. IP ellipsis of the answer clause leads to the overt realization of just the polarity particle as an answer in (**Error! Reference source not found.**).

5. Q: kyaa raghav-ne   kitab paDhii
       Q   raaghav-ERG book   read.PST.3FSg
       'Did Raghav read the book?'
    A: haan ~~raaghav-ne kitab paDhii~~
       Yes   raaghav-ERG book read.PST.3FSg
       Yes. (raghave read the book).

In this paper, I propose an analysis which explains the fact that IP ellipsis is only attested in Hindi when there is contrastive polarity. The account proposed is that a contrastive polarity head is merged higher in the structure and takes IP as its complement. The contrastive polarity head when available is merged with a Merchant(2005) style ellipsis feature which results in the ellipsis of the complement of the contrastive polarity head resulting effectively in IP ellipsis. A pragmatic motivation for contrastive polarity licensing IP ellipsis is that when contrastive polarity is overtly specified right after the antecedent clause, the rest of the 'elided' clause would become redundant as it is old information in the sense that the hearer becomes aware that the proposition introduced by the antecedent clause has been negated in the elided clause thereby licensing ellipsis of the clause under semantic identity.

The broad claim of this paper is that IP ellipsis in Hindi is licensed by polarity, which lends further support to similar claims made for other languages like Welsh and Finnish (Holmberg 2015), Russian (Gribanova 2017) and Irish (McCloskey 2017). However, the claims made in previous research were specific to IP ellipsis in fragment answers. Examining a broader spectrum of IP ellipsis patterns in Hindi leads us to believe that polarity and specifically contrastive polarity plays a more significant role than anticipated in previous literature. I conclude that polarity is not only relevant for fragment answers but for ellipsis in general.

Introduction: This paper discusses about Adverb interpretations in V-Stranding VP ellipsis(VVPE) in Tamil. This paper is divided into three sections. Firstly, It describes how Null object constructions(NOCs) in Tamil is analysed as VVPE in Tamil with possible diagnostics. Secondly it shows the reason for the availability of V-T movement in Tamil. Finally, it talks about the adjunct reading in ellipsis site. Tamil, one of the major languages in Dravidian family also have NOCs. Consider below example:

1	ramu	[$_{VP}$**vegama**	[**vandi**	**ootti-na-an**][28]	balu-um	taan[29]	[$_{VP}$...t$_v$]	ootti-na-an
	Ramu-Nom-3SM	quickly	car	drive-Pst-3SM	Balu-Nom-3SGM-UM[30]	Foc	Elided part(E)	Drive-Pst-3SM

'Ramu drove a car and Balu drove too'

VVPE in Tamil:By applying various diagnostics discussed in the literature, we can describe that Tamil NOCs can be accounted as VVPE. NOCs has three kinds of analysis in literature namely Pro analysis, Argument Ellipsis(AE) and V-Stranding VP ellipsis. With the availability of Sloppy/Quantificational and Disjunctive[31] Readings, NOCs in Tamil are analysed as Ellipsis. Table(2) shows whether NOCs in Tamil can be accounted for AE or VVPE.

Goldberg's(2005) for VVPE	Verb matching	V-T movement	Can occur in islands	Adjunct reading	Restitutive reading (Johnson 2004) adapted from Manetta (2018)
AE	No	-	No	No	No
VVPE	Yes	Yes	Yes	Yes	Yes

V-T movement: In Tamil, there is no motivation in syntax for V-T movement as adverbs or quantifiers don't occur between verb and objects like in French. But ellipsis can be an evidence for V-T movement in Tamil . Because when T is filled with an lexical item like modals, VP ellipsis is possible(as T has an lexical item, main verb stays inside the ellipsis site) as seen in example(2). French, a verb raising language also moves verb only when T is empty. So this shows that indeed there is V-T movement when T is empty and this results in VVPE occurances in Tamil.

2	Kamal-ku	[$_{VP}$**meduvaga**	**kaditam**	**elut-a]**	mudiy-um	mari-kk-um	taan [$_{VP}$.....]	mudiy-um
	Kamal-Dat-3SM	slowly	letter	write-Inf	can-3SN	Mary-DAT-UM	E	Can-3SN

---

28   Bolded and bracketed one is the antecedant for ellipsis site.
29   'taan' in Tamil is a third person pronoun and is also used to represent focus morphologically. (for more see, Murugaiyan 2009)
30   'um' in Tamil has various distributions and one among them is for adverb 'too'(Iyer 2017).
31   Sakamoto(2013) argues D readings in Japanese is more reliable for Ellipsis argument against pro analysis.

'Kamal can write letter slowly and Mary can too'

Adverbs and Negation in VVPE: Manner adverbs are very low in the syntactic structure and it is adjoined to VP layer. So it is an important diagnosis in VP ellipsis as it gets interpreted along with other VP items in ellipsis site. This is available in Tamil but with an exception. The adverb reading is not available when Negation comes in ellipsis part. Consider below examples:

3 ramu   [$_{VP}$**vegama vandi oott-a-la**] balu-um   taan   [$_{VP}$ oott-a-la (vegama)[32]...t$_v$]

Ramu-Nom-3SM   quickly   car   Drive-Inf-Neg   Balu-Nom-3SM-UM   Foc   E   Drive-Inf-Neg

'Ramu didn't drive car quickly and Balu didn't too'

4 ramu   [$_{VP}$**vegama vandi ootti-na-an**]   aana balu   [$_{VP}$ oott-a-(vegama)...t$_v$] la

Ramu-Nom-3SM   quickly   car   drive-Pst-3SM   but   Balu-Nom-3SM   E   Drive-Inf-Neg

'Ramu drove car quickly but Balu didn't drive car'

5 ramu   [$_{VP}$**vegama vandi oott-a-la**]   aana balu   [$_{VP}$...t$_v$] ootti-na-an

Ramu-Nom-3SM   quickly   car   Drive-Inf-Neg   but   Balu-Nom-3SM   E   drive-Pst-3SM

'Ramu didn't drive car quickly but Balu drove'

From examples 3 and 4, we can see adverb is not interpreted. But in (5) it is available where first conjunct is negated and ellipsis site is not negated. Only when ellipsis site is in negation, adverb reading is not available. Rasekhi (2016) for Persian and Manetta(2018) for Hindi/Urdu also has witnessed that adjunct reading is not available in downward entailing contexts in the ellipsis site. But when modal oocurs adverb reading is available even in negation context in ellipsis.

But there is no clear entailment relation in non-downward entailing contexts too. See entailment relation for example (1) where adverb reading is possible,

vegama vandi ottinaan(A)drove car quickly-->ootinaan(E)drove
But there is no reverse entailment here too. (A is for antecedent and E for Ellipsis survived part[33]). And also in contrary downward entailing relation is between Antecedant and Ellipsis survived part not with elided part. I follow Oku(2016)'s adaptation of Kuno(1982)'s Ban Against Partial Discourse Deletion. "If discourse deletion of recoverable constituents is to apply, apply it across the board to non-focus constituents. Non focus constituents which are left behind by partial discourse deletion will be reinterpreted, if possible, as representing contrastive foci."

---

32   '(vegama)' quickly is written in bracket to show that it is not interpreted in ellipsis site.
33   Ellipsis survived part is non elided parts in ellipsis (second conjunct).

When we apply this condition on VVPE in Tamil, the main verb which is left undeleted can be reinterpreted as contrastive focus. Oku(2016) says when a predicate is negated, negation on focus gives interpretation on undeleted part. Thus the reading will be 'Balu didn't drive at all' which doesn't imply 'Balu drove car quickly'. This is why adjunct reading is not possible. But when there is prosodic focus on adverb, adverb reading is possible even in negated predicates. When focus is there on adverb, adverb moves to immediately preverbal position and takes scope over the negation and gives 'quickly didn't drive' reading as in (b).

a. [vegama [vandi ootala]]   b.[vandi [vegama$_f$ ootala]]

In modal construction as given in example (2), there is no verb raising but VP ellipsis occurs. Because T is lexically filled with a modal. As main verb is not left undeleted, main verb don't take the focus from negation but the modal takes. So the predicate is not negated in such constructions and adverb reading is possible.

Conclusion
This paper concludes that information structure plays significant role in licensing adjunct reading in VVPE in Tamil apart from syntactic and semantic identity. This also tells that adjunct reading is optional in ellipsis and when needed with more information structute like focus it can be interpreted in ellipsis.

Abbrevations
3SM-3rd Person Singular Masculine; DAT-Dative; NOM-Nominative; ACC-Accusative; INF-Infinitive; PST-Past; N-Neutral.

References
Iyer, J. (2017). Towards a universal analysis of Tamil–UM NPIs: Evidence from unconditionals.
Kuno, S. (1982). Principles of discourse deletion-case studies from English, Russian and Japanese. *Journal of Semantics*, *1*(1), 61-93.
Murugaiyan, A. (2009). Focus Constructions in Modern Tamil. *International Journal of Dravidian Linguistics*, *38*(2), 43-69
Oku, S. (2009). Minimalism and information structure: A case of ellipsis in Japanese. Dept. of Linguistics and Philosophy, MIT.
Oku, S. (2016). A note on ellipsis-resistant constituents. *Nanzan linguistics: research results and activities*, *11*, 57-70.
Sakamoto, Y. (2015). Disjunction as a new diagnostic for (argument) ellipsis. In *Proceedings of the 45th annual meeting of the North East Linguistic Society* (Vol. 3, pp. 15-28).

[142] *Vedic bahuvrīhis between zeroing and contrastive accent: the case study of pṛthú-budhna / pṛthu-budhná.* ― Paola Maria Rossi, University of Milan

Since Whitney (1889: 501) defined the Sanskrit *bahuvrīhi* as a compound able to acquire the secondary value of adjective, although its *determinatum* constituent is a noun, it has been considered as an exocentric compound (see e.g. Bloomfield 1933: 235-36): attributing a property to a postulated external referent, which works as head even though it is phonologically zeroed. Such a null-suffix is generally explained as conveying morphological value of possessive (*having* X) added to an endocentric compound. Even though such an explanation does not satisfy completely all the possible syntactical implications conveyed by Sanskrit *bahuvrīhi*s (Gillon 2008), it sheds light on a functional opposition between endocentric and exocentric compounds derived from the same combination of two constituents. For instance, the endocentric compound *nīla-kaṇṭha*- 'dark-throat' employed as *bahuvrīhi* conveys the sense of dark-throated or from a different perspective can be considered as equivalent to "he, whose throat is dark" in accordance with the traditional *vigraha: nīlaḥ kaṇṭho yasya sa nīlakaṇṭhaḥ* or even this compound can also be analysed as a metonymy. The one dark-throat-ed is the specific god with dark throat so that the expression 'dark throat'

connotes the god, evoking his presence. In this perspective, "exocentric compounds are merely endocentric compounds which are interpreted by some figure of speech: synecdoche, metonymy, metaphor, etc. (Bauer 2018: 176).

As to the Vedic *bahuvrīhi*s, this interpretative framework turns out to be complicated by diverse elements, (Lühr 2004), especially by the accent; in fact, as established in Panini's grammar (6.2.1), the *bahuvrīhi* compound is generally stressed on the first member - more precisely it retains the original accent of the first constituent -, *de facto* contrastively with the matching endocentric compounds. Moreover, according to Kiparsky (2010), the Vedic accentuation is governed both by the Basic Accentuation Principle (BAP), which is well represented by the *bahuvrīhis,* and Oxytone Rule, which also interferes with some exocentric compounds. However, these accent rules do not explain some accentual ambiguities, such as the case of the *bahuvrīhi* compounds with *-u* stem adjectives as first constituent: e.g. *pṛthu-budhna* 'broad-foundation' occurs in the *Rigveda* with two outcomes, *pṛthú-budhna* and *pṛthu-budhná*, both conventionally translated as 'having broad foundation'. Although the *-u* stem adjectives determine a particular accentual behaviour in the compounds (Wackernagel 1957: 296), such diverse outcomes might acquire new meaning in the light of a syntactical analysis which would illustrate all the possible interpretative implications due to zeroing or to alternative syntactic explanations.

References

BAUER, L. (2018), "Conversion as Metonymy", *Word Structure* 11.2, 175-184.

BLOOMFIELD, L. (1933), *Language*, New York.

GILLON, B. (2008), "Exocentric Compound in Classical Sanskrit", Gérard Huet and Amba Kulkarni. First International Sanskrit Computational Linguistics Symposium, Oct 2007, Rocquencourt, France. 2007, http://hal.inria.fr/SANSKRIT/fr/. <inria-00202860>

KIPARSKY, P. (2010), "Compositional vs. Paradigmatic Approaches to Accent and Ablaut", in S. Jamison, H.C. Melchert, B. Vine (eds.) *Proceedings of the 21st Annual UCLA Indo-European Conference*, Bremen, 137-181.

LÜHR, R. (2004), "Contrastive Word Stress in Vedic Endo- and Exocentric Compound", in A. Staube (ed.) *Information Structure. Theorical and Empirical Aspects*, Berlin-New York, 163-194.

WACKERNAGEL, J. (1957), *Altindische Grammatik* II/1. *Nominalsuffixe,* hrsg. von A. Debrunner, Göttingen

WHITNEY, W.D. (1889[2]), *A Sanskrit Grammar, including both the Classical language, and the older Dialects, of Veda and Brahmana*, Harvard University, Cambridge, Mass.

SPECIAL SESSION 2 - SPRACHBUND

[143] *Language contact within the Sadani and Tribal Languages of Jharkhand* — Netra Prasad Paudyal, University of Kiel, Germany

Abstract: Following the pioneering work by Emeneau (1956) there have been many attempts by a number of scholars (for e.g., Masica 1976, Peterson 2010, 2017) to describe the areal features shared by languages belonging to the different language families in South Asia. Peterson (2010) and (2017) pay a more closer observation at language convergence in Jharkhand, concerning on Indo-Aryan and Munda languages. However, to my knowledge, there is no such study that deals with the linguistic features which arise due to the contact between the several Sadani (Eastern-Indo-Aryan) and Munda (Austro-Asiatic) languages. In this talk, we deal with lesser-known NIA languages, such as Khortha, Kurmali, Sadri/Nagpuri (Indo-Aryan ~ Sadani group), and other tribal languages like Munda and Santali, and discuss how they influenced each other in the eastern subcontinent of India.

References

Emeneau, Murray B. 1956. India as a linguistic area. *Language* 32, 3–16.
Masica, Colin. 1976. *Defining a Linguistic Area: South Asia*. Chicago: Chicago University Press.
Peterson, John. 2010. Language contact in jharkhand: Linguistic convergence and Indo-Aryan in eastern-central India. *Himalayan Linguistics*. Vol. 9(2): 56-86.
Peterson, John. 2017. Fitting the pieces together - Towards a linguistic prehistory of eastern-central South Asia (and beyond). *Journal of South Asian Languages and Linguistics,* 4(2): 211-257.

[144] *Language shift in Kathmandu: A study on language use and attitude* — Bhim Lal Gautam, Dept. of Linguistics, (NELTA) Tribhuvan University, Nepal

Abstract: This paper explores the patterns of language shift in Kathmandu valley, a multilingual capital city of Nepal. Kathmandu has become the cosmopolitan city due to different migration within last two decades and developed as a micro linguistic area. This research focuses on language contact situations of three language communities viz. Newar (Original), Sherpa and Maithili (Migrated) in different domains viz. social, cultural, personal, and official as well as media related activities where the informants are asked about the languages they use along with the use of their own mother tongue. The data was collected during June 2016 to September, 2017 among 135 different informants having different age, sex, profession and educational background from four major areas of the three ethnic communities living in Kathmandu valley i.e. Kathmandu, Patan and Bhaktapur. This socio-ethnographic research aims at providing some clues as to how the discovery of a minority language triggers changes in representations and attitudes. The data is analyzed in quantitative as well as qualitative methodology based on some in depth open informal interviews, FGD (Focus Group Discussions) and informal observations as well. The language attitudes towards Nepali and English along with their mother tongues seems to be influenced by positive affective socialization experiences in the new multilingual society and by the growing perception that knowing the languages make them member of the new community. It is emphasized that "distinctive ethnic identities of minority groups, for example, must be constructed from linguistic symbols and/or communicative practices that contrast with resources available for the construction of other ethnic identities or more generally, available national identities" (Kroskrity 2000: 112). The new language and the new identity may be actively promoted or persuaded. Different ethnic people living in the capital city have been influenced directly and indirectly by the globalization and international linkage and communication. Moreover, they have been involved in various social, cultural and ceremonial activities with the new mixed society which motivates them to shift into new target languages from the ancestral source language.

References

Baker, C. 2007. Becoming bilingual through bilingual education. In P. Auer & L. Wei (Eds.) *Handbook of multilingualism and multilingual communication* (pp. 131-152). Berlin, Germany: Mouton de Gruyter.

Central Bureau of Statistics 1952/54-1011. Population Census, National Planning Commission (NPC), Kathmandu, Nepal.

Fishman, J.A. 1972 *The sociology of language: An interdisciplinary social science approach to language in society.* Rowley, MA, Newbury House.

Gardner, R.C 1985. *Social psychology and second language learning: the role of attitude and motivation.* London: Arnold.

Gautam, Bhim Lal 2012. *Contact Nepali in Kathmandu valley: Convergence between TB & IA languages.* Nepalese Linguistics, Vol. 27, 2012, pp.38-42

Gautam, Bhim Lal 2017. *Language use and attitude among the Sherpa speaking community in Kathmandu valley* Gipan, Volume 3:2 pp.26-37, Central Department of linguistics, TU, Kathmandu

Gautam, Bhim Lal 2018. Language *Shift in Newar: A case study in the Kathmandu valley.* Nepalese Linguistics, Vol. 33(1), 2018, pp.33-42.

Grinevald , C. 1998. Language Contact and Language Degeneration. In F.Coulmas (Ed.), *The Handbook of Sociolinguistics* (Oxford., pp. 257-270). Blackwell Publishing.

Kroskrity, Paul V. (Ed). 2000. *Regimes of Language: Ideologies, Polities, and Identities.* Santa Fe, NM: School of American Research Press

Kroskrity, P.V.2004. Language ideologies. In A. Duranti (Ed.), *A companion to linguistic anthropology* (pp. 496-517). Oxford: Blackwell.

Malla,Kamal Praksh 2015. *From Literature to Culture: Selected writings on Nepalese Studies,1980-2010* Kathmandu, Social Science Baha.

Ricento, T. (Ed.). 2015. *Language policy and political economy: English in a global Context.* Oxford & New York: Oxford University Press.

Sallabank, Julia *2013Attitudes to endangered languages: identities and Policies,* Cambridge University Press, New York

Selma K. Sonntag, 2007"Change and Permanence in Language Politics in Nepal," in Amy B.M. Tsui and James Tollefson (eds.), *Language Policy, Culture, and Identity in Asian Contexts* Mahwah: Lawrence Erlbaum (pp. 205-217).

Thapa Renu,Binod Luitel, Bhim Lal Gautam & Kamal Raj Devkota (2018) *Language shift in Nepal: A General Study* a report submitted to Language Commission Nepal, Kathmandu.

[145] *Loanwords and contact-induced changes in Raji* ─ Dubi Nanda Dhakal, Tribhuvan University, Kathmandu, Nepal

This paper shows the contact situation of one of the varieties of Raji, a Tibeto-Burman language spoken in the western Nepal. This paper discusses the loanwords in Raji, and some cases of morphosyntactic borrowings in Raji. The analysis of the morphosyntactic borrowing discussed here is based on the corpus gathered and analyzed in Dhakal (2018b). Bradley (1997) classifies Raji as a Tibeto-Burman language belonging to the central group of Himalayan language within Western Tibeto-Burman (Bradley 1997).The language is described as 'threatened' (Eppele et al. 2012).The borrowing discussed in this paper is based on Purbbiya Raji, one of the three variations of Raji. Bilingualism is common among the Raji speakers. They are not in the majority in the areas where they live. Earlier to the resettlement of these Raji households, they used to live in the areas near Bardiya National Park. The Rajis moved to the present location after the Nepalese government enforced the resettlement program in this area. The Rajis used to have conservative life styles before they moved to this village. They were semi-nomadic hunter gatherers in the past (van Driem 2007:310). When the author visited the villages twice in 2017, he found that they were using their language when they would speak among the Raji speakers. However, it was observed that the children would speak more Nepali compared to Raji.

The lexical borrowing in Raji is different when we take different wordlist. For examples, only 12 words are borrowed taking into account of the Swadesh 100 words. The loanword percentage increases to 35 % when we take into account of 210 words (Khatri 2008:15). Nearly half of the lexical items are borrowed when we take the lexical items in Dhakal (2018). This is the largest lexical items collected and organized in semantic fields till the date. The loanword percentage mentioned Looking at different wordlists, the number of borrowing is different.

A more detailed analysis is needed to talk about the contact-induced changes in the Raji phonology and phonetics. However, there are some clear cases of contact-induced changes from Nepali in Raji morphosyntax. The morphosntactic borrowing mentioned here is based only on the corpus gathered in Dhakal (2018a). The bilingual speakers use the native structures in most of the cases, but also make use of the borrowed structures in other discourse contexts. A few morphological borrowings can be cited in this paper to illustrate the case.

There are some cases of morphological borrowings in Raji. For example, although Raji has its native classifier -*ʈhõ*, and -*ghil*, it also borrows the Nepali classifier -*oʈa, -goʈa* (1).

(1) tsau plaŋ-goʈa
     son five-CLF
     'Five brothers' [Five brothers.1]

The dative case marker -*lai* is a *hapex legomena* in Raji corpus. There is a phrase in the discourse, such as *dzei-lai* 'for mother' in which the speakers makes use of the borrowed dative postposition from Nepali instead of using the native marker -*kəna*.

The emphatic clitic -*ei* is also borrowed from Nepal because there is an emphatic clitic -*l* in Raji. For example, the nominalizing suffix is -*hjaŋ* in Raji, but uses the nominalizing suffix -*ai* from Nepali. The causative suffix -*a* is borrowed from Nepali when the verb itself is borrowed from Indic languages. The causative -*a* is also common in a number of Indo-Aryan languages (Masica 1991).

(2) ərko-kə-l kam khəi-ʈna nhəu ŋəi-kəna pəɖh-**a**-si
     other-GEN-EMPH work do-CVB (SEQ) later we-DAT read-**CAUS**-PST
     'Having done work in wages, (she) made us read.'[Bhim_Exp1_39]

We find some clear cases of the borrowing in the syntactic structures. Raji also borrows some conjunctions from Nepali, such as, *tərə* 'but' (they also used the conjunction ʈəraŋ), and *təbə* 'and then', *əthəwa* 'or', *əni* 'and then', *təipəni* 'in spite of /despite', *təipəni* 'even then', and *rə* 'and'.

The echo words begin with -*o* in Raji, but due to contact with Nepali, the speakers also make use of the echo words like that in Nepali. We find both kinds of words in Raji, but it is clear that the making of the echo words that begin with *s*- is borrowing from Nepali.

(3) bəʈa-oʈa phin-ʈəna ʈhikkə khə-ja
     rice-ECHO cook-CVB (SEQ) right do-PST
     'Having cooked rice, and other items, they made it ready.'[Five_brothers_224]
(4) bramən sramən dzjotis sjotis tsai-jaŋ-ma
     Brahmin ECHO priest ECHO need-INF-NEG
     '(We) don't need Brahmins, and priests.'[Death_Ritual_9]

The clause combining with *əni* is borrowed into Raji from Nepali because we see that similar kind of structure is found in Raji by using the conjunction *nhəu* 'and then'. Raji has the kind of native structure as in (5), but the structure (6) is borrowed from Nepali.

(5) nhəu agə sərsəphai khəi-njaŋ
    and then thenclean do-NMLZ
    'And then (we) would do the cleaning.[Bhim_exp2_67]
(6) **əni** pəisa bəi-njaŋ
    and then money give-NMLZ
    'And then he would give money.[Bhim_exp1_61]

The purposive clause is calqued (7).

(7) əul həʈa-m-**kə lagəi**
    maleria remove-PURP-GEN for
    'To remove maleria'[About_village_Gopi_65]

A number of discourse particles are borrowed from Nepali. For example the particle *ki* 'perhaps it is so', *tə* 'as for' among others.

References
Bradley, D. (1997). "Tibeto-Burman Languages and Classification." In: *Papers in Southeast Asian Linguistics No. 14: Tibeto-Burman Languages of the Himalayas*. Canberra, Pacific Linguistics (series A-86):1-72.
Dhakal, D.N. (2018a). *A Raji-English Lexicon*. Muenchen: Lincom Europa.
Dhakal, D.N. (2018b). "Documenting the Oral Genres and Wordlist of Raji" (2018e). A Research Report Submitted to Endangered Languages Fund, New Haven, USA.
Eppele, J. W.; M. P. Lewis, D. R. Regmi; Y. P. Yadava. (2012). *Ethnologue: Languages of Nepal*. Kathmandu: Linguistic Survey of Nepal and SIL International.
Haspelmath, M. & Tadmor, U. (2009). Loanword Typology Project and the World Loanword Database. In: *Loanword in the world's Languages: A Comparative Handbook* (eds) M. Haspelmath & U. Tadmor (eds), Berlin/ New York: Mouton de Gruyter.1-34.
Khatri, R. & Shah, K.K. (2008). *The Documentation of the Raji Language*. A Report submitted to the National Foundation for Development of Indigenous Nationalities (NFDIN).
Masica, C.P. (1991).*The Indo-Aryan Languages*.Cambridge, Cambridge University Press.
Van Driem, G. (2007).South Asia and Middle East. In: *Encyclopedia of world's endangered languages*. Christopher Moseley (ed). London: Cambridge University Press.

[146] *Investigating and measuring linguistic areality in the Hindu Kush-Karakoram region* ― Henrik Liljegren, Department of Linguistics, University of Stockholm

More than 50 distinct ethnolinguistic communities inhabit the mountainous northwestern outskirts of the subcontinent. This region, here referred to as Hindu Kush-Karakoram, is spread over the territories of several countries -- primarily Afghanistan, Pakistan and India -- and comprises languages belonging to six genera: Indo-Aryan (in majority), Nuristani, Iranian, Tibeto-Burman, Turkic and the isolate Burushaski. The linguistic profile of this region and its significance as a contact zone or linguistic area has been the topic of a discussion going on for several decades (Toporov 1970; Èdel'man 1980; 1983: 16; Bashir 1996a; 1996b; 2003: 823; 2016; Baart 2014; Tikkanen 1999; 2008; Koptjevskaja-Tamm & Liljegren 2017: 215–223), but the tendency has been to focus on individual features and phenomena, sometimes based on

relatively sparse data, and more seldom have there been attempts at applying a higher degree of feature aggregation with tight sampling.

In the present study, comparable first-hand data from as many as 59 Hindu Kush-Karakoram language varieties, was collected and analyzed. The data allowed for setting up a basic word list of 95 comparable meanings (representing close kinship, lower numerals, basic actions, substances and objects) as well as for classifying each variety according to approximately 50 binary structural features (reflecting phonological, morphological, syntactic and lexico-semantic properties). While a comparison of the basic lexicon across the varieties lines up very closely with established phylogenetic classification, structural similarity clustering (visualized by means of NeighborNet) is clearly related to geographical proximity within the region and often cuts across phylogenetic boundaries. The strongest evidence of areality tied to the region itself (vis-à-vis South Asia in general on the one hand and Central/West Asia on the other) relates to phonology and lexical structure, whereas word order and alignment features mostly place the region's languages within a larger areal or macro-areal distribution, and many morphological features or properties related to grammatical categorization (e.g. gender) display a high degree of genetic stability.

The distinctly sub-areal clustering of the many Indo-Aryan varieties (33 out of 59), each along with a set of non-Indo-Aryan languages, suggests multiple centres of diffusion or parallel development, some of them very old and mostly likely of substratal nature, others reflecting contact patterns of a more recent date. Two putative sub-areas of particular interest are: a) a central west-to-east-stretching belt, including many Indo-Aryan languages, the isolate Burushaski as well as most of the Nuristani languages, and b) a northern belt, partly coinciding with the Wakhan corridor, including Indo-Aryan, Iranian and possibly one of the Nuristani varieties. The remaining Indo-Aryan languages, mostly at the southeastern and southwestern peripheries, group structurally either with more typically South Asian languages, such as Indo-Aryan Urdu-Hindi and Iranian Pashto, or with typically Central/West Asian languages, such as Iranian Dari and Turkic. These tentative results lend support to the scenario painted by Morgenstierne (1961: 138; 1974: 2–3), echoed by Strand (1973: 207–208; 2001: 251), according to which the Indo-Aryan languages of the region can be traced back to a cluster of northwestern Indo-Aryan varieties that developed and differentiated in the plains south of the Hindu Kush before gradually penetrating the mountainous area from the south, after which these varieties gradually evolved into the present-day languages and dialects, strongly influenced by adjacent non-Indo-Aryan languages already present in their new environments. These results further refute, once again, the relevance of a "Dardic" level below that of Indo-Aryan (or possibly northwestern Indo-Aryan), whether intended as a phylogenetic label or an areally defined term.

References

Baart, Joan L. G. 2014. Tone and stress in North-West Indo-Aryan: A survey. In Johanneke Caspers, Yiya Chen, Willemijn Heeren, Jos Pacilly, Niels O. Schiller & Ellen van Zanten (eds.), *Above and Beyond the Segments*, 1–13. Amsterdam: John Benjamins Publishing Company.

Bashir, Elena. 1996a. Mosaic of tongues: Quotatives and complementizers in Northwest Indo-Aryan, Burushaski, and Balti. In William L Hanaway & Wilma Heston (eds.), *Studies in Pakistani popular culture*, 187–286. Lahore: Lok Virsa Pub. House and Sang-e-Meel Publications.

Bashir, Elena. 1996b. The areal position of Khowar: South Asian and other affinities. In Elena Bashir & Israr-ud-Din (eds.), *Proceedings of the Second International Hindukush Cultural Conference* (Hindukush and Karakoram Studies v. 1), 167–179. Karachi: Oxford University Press.

Bashir, Elena. 2003. Dardic. In George Cardona & Danesh Jain (eds.), *The Indo-Aryan Languages*, 818–894. London: Routledge.

Bashir, Elena. 2016. Pre-1947 convergences. In Hock Hans Henrich & Bashir Elena (eds.), *The Languages and Linguistics of South Asia, A Comprehensive Guide*, 264–284. Berlin, Boston: De Gruyter Mouton. doi:10.1515/9783110423303. https://www.degruyter.com/view/product/429184 (22 November, 2018).

Èdel'man, Džoi Iosifovna. 1980. K substratnomu naslediju central'no-aziatskogo jazykovogo sojuza. *Voprosy jazykoznanija* 5. 21–32.

Èdel'man, Džoi Iosifovna. 1983. *The Dardic and Nuristani languages* (Languages of Asia and Africa). Moscow: Nauka.

Koptjevskaja-Tamm, Maria & Henrik Liljegren. 2017. Semantic patterns from an areal perspective. In Raymond Hickey (ed.), *The Cambridge Handbook of Areal Linguistics*, 204–236. Cambridge: Cambridge University Press.

Morgenstierne, Georg. 1961. Dardic and Kafir Languages. *Encyclopedia of Islam*, vol. 2, Fasc. 25, 138–139. New Edition. Leiden: E.J. Brill.

Morgenstierne, Georg. 1974. Languages of Nuristan and surrounding regions. *Cultures of the Hindukush: Selected papers from the Hindu-Kush Cultural Conference held at Moesgård 1970* (Beträge Zur Südasienforschung), vol. 1, 1–10. Wiesbaden: Franz Steiner Verlag.

Strand, Richard F. 1973. Notes on the Nuristani and Dardic Languages. *Journal of the American Oriental Society* 93(3). 297–305. doi:10.2307/599462.

Strand, Richard F. 2001. The tongues of Peristân. Appendix 1. In Alberto Cacopardo & Augusto Cacopardo (eds.), *Gates of Peristan: History, Religion and Society in the Hindu Kush* (Reports and Memoirs 5), 251–257. Rome: Istituto Italiano per l'Africa e l'Oriente (IsIAO).

Tikkanen, Bertil. 1999. Archaeological-linguistic correlations in the formation of retroflex typologies and correlating areal features in South Asia. In Roger Blench & Matthew Spriggs (eds.), *Archaeology and language IV: Language change and cultural transformation*, 138–148. London: Routledge.

Tikkanen, Bertil. 2008. Some areal phonological isoglosses in the transit zone between South and Central Asia. In Israr-ud-Din (ed.), *Proceedings of the third International Hindu Kush Cultural Conference*, 250–262. Karachi: Oxford University Press.

Toporov, Vladimir Nikolayevich. 1970. About the phonological typology of Burushaski. In Roman Jakobson & Shigeo Kawamoto (eds.), *Studies in General and Oriental Linguistics Presented to Shiro Hattori on the occasion of his sixtieth birthday*, 632–647. Tokyo: TEC Corporation for Language and Educational Research.

[147] *Convergence or not? Geography and history* ― Hans H. Hock, Department of Linguistics, University of Illinois, USA

Behind every geography-based argument for convergence areas ought to lurk the question whether the geographical feature alignments are shared archaisms, result from contact, or are accidental. In many cases, the issue of shared archaisms is easily addressed. For instance both Dravidian and Indo-Aryan have inherited SOV, although details might differ. The choice between contact and accident is often more difficult. In Brasil, e.g., both Portuguese and various indigenous languages have a contrast between oral and nasal vowels, but that contrast is unlikely to result from contact: It is inherited in Portuguese and its dynamics fundamentally differ in indigenous languages (for these, see e.g. Epps & Salanova 2013).

This paper examines three case histories from South Asia. In two of these, closer examination shows that contact explanations for the similarities are problematic either from the geographic or the historical perspective; by contrast, in the third case, geography and history dove-tail.

Hmar (Kuki-Chin) has a contrast dental: retroflex and it is tempting to consider this to be just another instance of "India as a Linguistic Area". Fine-grained geographic details, however, render a convergence account problematic: The nearest Indo-Aryan language, Chakma, lacks the contrast, and there are no other languages nearby that might be a source for the contrast. The similarity to other, geographically more remote South Asian languages, therefore, appears to be accidental.

Hock (1996) points to a geographical alignment of Dravidian and Indo-Aryan regarding the development of alveolar stops or clusters of alveolar *r* + dental stop. However, as he himself notes, a contact explanation is chronologically problematic: The Indo-Aryan developments go back to the earliest stages, while the

Dravidian ones are not yet found in the earliest attestations. The geographic distribution therefore may well be accidental.

Krishnamurti (1991) observes that both Dravidian and Indo-Aryan share developments that include shortening of long vowels before consonant clusters, and he argues that the Indo-Aryan change 'must have been triggered by intimate contact with Dravidian …' I show that the geographical evidence in favor of convergence is strong: Exceptions are found at the extreme ends of the area, suggesting a classic distribution of a Dravidian/Indo-Aryan core area and peripheral areas. The historical evidence dovetails with the geographic one: In both language families the elimination of V̄CC configurations is an innovation. (Interestingly, the process appears earlier in Indo-Aryan than in Dravidian, suggesting that it may have spread from Indo-Aryan to Dravidian.)

I conclude that geographic distributions of features may indeed be accidental. To be persuasive, convergence interpretations of such features must be based on fine-grained examinations of the geography and, most important, on clear historical support.

References
Epps, Patience, and Andrés Pablo Salanova. 2013. The languages of Amazonia. *Tipití: Journal of the Society for the Anthropology of Lowland South America*. 11 (1): 1-27.
Hock, Hans Henrich. 1996. Pre-R̥gvedic convergence between Indo-Aryan (Sanskrit) and Dravidian? A survey of the issues and controversies. *Ideology and status of Sanskrit: Contributions to the history of the Sanskrit language*, ed. by J. E. M. Houben, 17-58. Leiden: Brill.
Krishnamurti, Bh(adriraju). 1991. The emergence of the syllable types of stems (C)VCC(V) and (C)V̄C(V) in Indo-Aryan and Dravidian: Conspiracy or convergence? *Studies in the historical phonology of Asian languages*, ed. by W. G. Boltz and M. C. Shapiro, 160-175. Amsterdam/Philadelphia: Benjamins.

[148] *Shaping modern Indo-Aryan isogloses* ─ Stroński, Krzysztof, Adam Mickiewicz University, Poznań, Poland; Verbeke, Saartje, University of Ghent, Belgium

Since the pioneering paper by Emenau (1956) there have been many attempts (cf. Masica 1976; 2001; Ebert 2001 among many others) to select areal features which are shared among languages spoken in South Asia. However, there has been little consent on the number of such features and the possible direction of their spread.
In this presentation we select the isoglosses of alignment and constituent order. Both of them have been used to define the Indo-Aryan linguistic area: alignment is one of the key elements to distinguish western from eastern Indo-Aryan (Peterson 2017) and word order is essential to make a distinction between the "Outer" and "Inner" Indo-Aryan languages (Zoller 2017).

We focus on two languages which are said to determine these isoglosses: Awadhi and Kashmiri. Both languages are compared with Pahari, a language branch which functions as a link between the two of them. Our study of Awadhi shows that the isogloss determining ergative or accusative case marking is situated in the area where the so called Eastern Hindi dialects (among them Awadhi) are spoken. On one hand Early Awadhi still preserves ergative marking of A and verbal agreement with O which are standard features of the ergative alignment in IA (cf. Stroński 2012). Contemporary Awadhi is on the other hand fully nominative-accusative at the level of morphosyntax, yet OV agreement and A making is also attested. This is possibly related to language contact with some Western Hindi dialects such as Kannauji (cf. Masica 1991: 477; Smith 1974; Liperovskij 1997).

The research on Kashmiri shows that Old Kashmiri did not have the strict V2 word order as Modern Kashmiri does. However, it is clear that verb final word order has gradually been lost (cf. Verbeke 2018). One notices a freer position of the verb, without the rigidity of verb second word order. The situation in Old Kashmiri is in fact very similar to the situation present in some contemporary Western Pahari dialects such as Bangani, Outer Siraji (cf. Zoller 2017): a tendency towards verb second word order, without the rigid standardization of the order as found in modern Kashmiri. It seems also to be the case of Kului which was recently reported by Renkovskaja (2018). Our comparison of Kashmiri with certain Western Pahari Himachali languages shows that there is no clear borderline between the two language groups supported by word order.

We conclude from these case studies that the study of isoglosses is by definition a study of fluid boundaries, and qualitative, historical studies of one language can prove or disprove hypotheses based on synchronic similarities between languages.

The analysis is based on corpus study of literary Awadhi (Malik Muhammad Jayasi's 'Padamat' 1540 CE and Tulsidas' 'Ramcaritamanasa' 1577CE) and Kashmiri ('Banasurakatha' 15th c.) sources.

References

Ebert, Karen, 2001. Südasien als Sprachbund. In Haspelmath, Martin, Ekkehard König, Wulf Oesterreicher, & Wolfgang Raible (eds.) *Language typology and language universals: an international handbook*, 1529 – 1539. Berlin: Walter de Gruyter.

Emeneau, Murray. 1956. India as a Linguistic Area. *Language*. 32 (1): 3–16

Liperovskij Vladimir P., 1997. *Očerk grammatiki sovremennogo avadhi.* Moskva: Izdatel'skaja Firma 'Vostočnaja Literatura' RAN.

Masica, Colin. 1976. *Defining a Linguistic Area: South Asia*. Chicago: Chicago University Press.

Masica, Colin P., 1991. *The Indo-Aryan Languages*. Cambridge: CUP.

Smith, Richard Rhodes. 1974. *Awadhi/Kannauji transition phenomena and their correlates: a study in dialect geography.* (Cornell University Ph.D. dissertation)

Masica, Colin. 2001. The definition and significance of linguistic areas: methods, pitfalls, and possibilities (with special reference to the validity of South Asia as a linguistic area). In: Singh, Rajendra, Bhaskararao, Peri, and Subbarao, Kurumuri V. eds. *The yearbook of South Asian languages and linguistics 2001. Tokyo symposium on South Asian languages: Contact, convergence and typology*. New Delhi: Sage. 205–267.

Peterson, John. 2017. Fitting the pieces together – Towards a linguistic prehistory of eastern-central South Asia (and beyond). *Journal of South Asian Languages and Linguistics* 4(2): 211-257.

Renkovskaja, Evgenija. 2018. Genitive marking of arguments in Kullui (Indo-Aryan) (Paper presented at the 51st SLE Meeting in Tallin 29.08-01.09.2018)

Stroński, Krzysztof. 2012. Synchronic and diachronic aspects of ergativity in Indo-Aryan. Poznań: Adam Mickiewicz University Press.

Verbeke, Saartje. 2018. *Argument structure in Kashmiri. Form and function of pronominal suffixation.* Leiden: Brill.

Zoller, Claus P. 2007. Is Bangani a V2 language? *European Bulletin of Himalayan Research* 31: 83-141.

[149] *South Asian linguistic relationships reflected in the LSI* ─ Lars Borin, University of Gothenburg, Sweden; Anju Saxena, Uppsala University, Sweden; Bernard Comrie, University of California, Santa Barbara, USA; Shafqat Mumtaz Virk, University of Gothenburg, Sweden

South Asia is home to well over 600 languages according to both *Ethnologue* (Simons and Fennig 2018) and *Glottolog* (Hammarström et al. 2018). Most belong to four major language families (Indo-European > Indo-Aryan, Iranian, and Nuristani; Dravidian; Austroasiatic > Munda, Khasian, and Nicobaric; and Sino-Tibetan > "Tibeto-Burman"). In addition there are some language isolates and small families (Georg 2017) and several creoles and pidgins.

There is a long history of multilingualism, expansions and contractions of language communities, and shifting patterns of sociolinguistic dominance in the region. This complex linguistic situation gives rise to a multitude of intricate descriptive problems. In this presentation, we will focus on two long-standing and closely interconnected problems: the question of South Asia as a linguistic area and the subgrouping of the Indo-Aryan languages. Unlike the other major language families of South Asia, Indo-Aryan is both largely confined to this region and at the same time widespread throughout South Asia, making areal and genetic components difficult to disentangle when investigating the internal structure of the family.

We will present the results of a large-scale quantitative comparative study examining the genetic and areal distribution of 63 linguistic features in 200 South Asian linguistic varieties. The linguistic varieties included in our investigation are: 11 Dravidian, 110 Indo-Aryan, 68 Tibeto-Burman, 7 Munda, 3 Nuristani languages, and 1 isolate (Burushaski). Linguistic features include phonetic, morphological, and syntactic features. Grierson's *Linguistic Survey of India* (LSI; Grierson 1903–1927) has been used as the primary data source. Given the size of our dataset, our approach to these questions is based on applying an e-science methodology, in the form of large-scale computer processing and visualization of the data. We discuss the rationale for doing this and present results from the three kinds of computational tools that we have applied to our dataset: phylogenetic software (SplitsTree4 with both NeighborNet and UPGMA clustering; Huson and Bryant 2006), multiple correspondence analysis, and map visualization.

In the presentation we will also draw some preliminary conclusions. For example, the groupings defined by the phylogenetic graphs generated by SplitsTree4 are neither all genetic nor all geographical. There are some clear genetic groupings, but also some groupings which seem to have a geographical component. Concerning the latter, there is no noticeable north–south division emerging from our data. Instead, the main geographical dividing line seems to be between a more westerly and a more easterly group of languages, roughly along longitude 85° E, coinciding with observations made in the literature (Hock and Bashir 2016; Peterson 2017).
As we will show, NeighborNet and UPGMA do not generate the same results in all cases. This raises questions about the methodology itself. How should one interpret the cases where the NeighborNet and UPGMA diagrams differ? In our presentation we will discuss this and other methodological questions connected to the use of these kinds of computational tools for large-scale comparative linguistic analysis.

References

Georg, Stefan. 2017. Other isolated languages of Asia. Lyle Campbell (ed), *Language isolates*. London: Routledge. 139–161.

Grierson, George A. 1903–1927. *A linguistic survey of India*, vol. I–XI. Calcutta: Government of India, Central Publication Branch.

Hammarström, Harald, Robert Forkel, and Martin Haspelmath. 2018. *Glottolog 3.3*. Jena: Max Planck Institute for the Science of Human History. Available online at <https://glottolog.org>.

Hock, Hans Henrich and Elena Bashir (eds). 2016. *The languages and linguistics of South Asia: A comprehensive guide*. Berlin: De Gruyter Mouton.

Huson, Daniel H. and David Bryant. 2006. Application of phylogenetic networks in evolutionary studies. *Molecular Biology and Evolution* 23(2): 254–267.

Peterson, John. 2017. Fitting the pieces together – Towards a linguistic prehistory of eastern-central South Asia (and beyond). *Journal of South Asian Languages and Linguistics* 4(2): 211–257.

Simons, Gary F. and Charles D. Fennig (eds). 2018. *Ethnologue: Languages of the world*. Dallas: SIL International. Online version: http: //www.ethnologue.com.

[150] *Mundari-based Link Languages and Changing Nature of Bilingualism among School Children of West Medinipur* ― Dripta Piplai, Indian Institute of Technology Kharagpur, West Bengal, India

The speakers of Mundari, an Austro-Asiatic language in West Medinipur area of West Bengal, India created two different contact languages on the banks of the river Subarnarekha. Several Mundari-based creoles (e.g. Kurmali, Kulatiya etc.) are common in the Sprachbund which are located at the border areas of West Bengal, Odisha and Jharkhand. This can be considered as a part of the Accretion Zones (Nichols, 1997) of the Indo-Gangetic Plains. One can observe structural diversity among the contact languages of the area where there are relatively new Lingue Franche and local bi and/or multilingualism. Peterson (in press) mentioned that Munda is largely restricted to the Accretion Zones and spoken in a wider area, where it has been assimilated to the language and culture of the Indo-Aryan people with a Munda substrate.

The creoles in the West Medinipur area of Bengal, India have a frame of Indo-Aryan languages and serve the purpose of link languages across different communities. Morphological features of Mundari (Osada, 2008, Hoffman, 2010) have altered in the West Medinipur region due to contact with two major Indo-Aryan languages of the area: Bangla and Odia.

Exposure to formal schooling adds a different layer to the bi/multilingualism of the children who belong to Munda communities. As children travel a distance to access higher level schools, the chances of getting exposure to a different kind of link language increase. The children also realizes the position of different types of link languages in a hierarchy. It adds another layer to their everyday multilingualism.

The paper:

(a) Gives an overview of the two different contact languages located on the banks of Subarnarekha river at West Medinipur area of Bengal
(b) Discuss the nature of bilingualism among the rural versus semi-urban speakers of Mundari-based link languages
(c) Presents a brief outline of the language profile of the children of the community who are adding a different layer to their everyday bilingualism as a result of attending formal schools.

References

Hoffman, J.B. 2010. *Mundari Grammar and Exercises*. New Delhi: Gyan Publishing House.
Nichols, J. 1997. 'Modelling Ancient Population Structures and Movement in Linguistics', *Annual Review of Anthropology* 26: 359-384
Osada, T. 'Mundari' in Anderson, G.D.S. (Ed). 2008. *The Munda Languages*. London: Routledge.
Peterson, J. (in press) Fitting the Pieces Together. Towards a Linguistic History of Eastern- Central South Asia (and beyond) To appear in *Journal of South Asian Languages and Linguistics*, 4(2).

[151] *Pronominal affixes in North Western Indo-Aryan Languages* ― Shah Bibi, Lasbela University of Agriculture, Pakistan; Ghulam Raza, Pakistan Institute of Engineering and Applied Sciences, Pakistan; Nasir Abbas Rizvi Syed, Lasbela University of Agriculture, Pakistan

This paper analyses pronominal suffixes in North-Western Indo-Aryan (NWIA) languages spoken in a particular region namely, Lasi dialect of Sindhi, Khetrani (an understudied language of Balochistan) and Saraiki. The study demonstrates with examples grammatical function and behaviour of, and interaction between cases and pronominal affixation, and movement of pronominal clitics. All these languages allow single and double affixes (for Khetrani: Birmani & Ahmad, 2017; for Saraiki: Bashir, Conners & Hefright,

2018; for Sindhi: Khubchandani, 1962). In some tenses, both pronouns and pronominal suffixes are permitted simultaneously, but in others, either pronouns or pronominal affixes are allowed. In contexts where pronominal suffixes of objects and subjects are combined, the object follows the subject. Whereas single suffixes create problems of semantic confusion related to polysemy or syncretism, double suffixation leads to complex morphological structure involving ordering parameters or multiple arguments combined into a single (verbal) stem. Co-existence of gender-, number- and person-agreement and pronominal affixes makes morphological structure of words further complicated in these languages.

Some within family variations are also noticed in these languages. For example, in Saraiki and Lasi, Pronominal suffixes are attached to various hosts like principal verb, aspectual Verb, noun, negative polarity marker, and copula. Nouns also host pronominal suffixes in genitive and locative cases examples of which are listed in Appendix E. Besides similarities, some within sub-family differences are also found in these languages with reference to their treatment of pronominal affixation. For example, affixation with aspectual verbs is allowed in perfect tenses and Future Perfect Continuous in Lasi but in Saraiki, it is allowed in all tenses. In Lasi, principal Verbs host pronominal affixes in continuous tense but number and gender agreement markers are attached with aspectual verbs; but in perfect tenses, agreement markers disappear and pronominal affixes are hosted by aspectual verbs (Appendix- B). In Saraiki and Khetrani, on the other hand, order of affixes of agreement markers and pronominal affixes is fixed i.e. the pronominal affix of first person which is always a subject of the principal verb precedes that of third person which is always in accusative case. But in Lasi, there is no strict order of occurrence of persons because their position depends on the status of pronouns i.e. whether they are subject or object regardless of persons (Appendix-C). Pronominal affixes cannot swap positions in Saraiki and Khetrani but, in some contexts, some affixes can change their positions in Lasi; in the same context they can be either anchored or infixed (Appendix-D).Negative polarity item (NPI) 'not' attracts pronominal affixes in Sariaki, but not in Lasi or Khetrani; however, Lasi does allow number/gender agreement marker with NPI in Present Indefinite tense (Appendix-F).

All these languages also have person agreement with verbs and number and gender agreement with verbs and nouns. Interestingly, in Saraiki, third persons have zero agreement markers leaving the verbal stem empty (without the agreement marker). In such a context, the empty slot is occupied by a pronominal suffix of a dependent of the subject phrase which is not really a subject. Similarly, ergativity also causes change in sequence of occurrence of double suffixes further complicating the phenomenon. We compare the nature of such agreement and affixation in these languages with primary data obtained from the native speakers.

Overall, pronominal suffixes have limited occurrence in Saraiki and Khetrani than in Sindhi (Lasi). We ascribe this to language contact situation arguing that the former languages lost some of the features of pronominal suffixation due to their contact with neighbouring cousin Punjabi which does not have simultaneously double suffixation. On the other hand, Lasi is in contact with Brahvi and Balochi, the latter (an Iranian language) being a distant relative and the former (a Dravidian language) has no relation with Lasi. This paper concludes that cousin/sister languages exert stronger influence in a contact situation than languages of distant relations.

References
Bashir, E., Conners, T. J., & Hefright, B. (2018). *A Descriptive Grammar of Hindko, Panjabi and Saraiki*. Berlin: De Gruyter Mouton.
Birmani, A. H., & Ahmed, F. (2017). Language of the Khetrans of Barkhan of Pakistani Balochistan: A preliminary description. *Lingua*, *191*, 3-21.
Khubchandani, L. (1962). Pronominal suffixes in Sindhi.*Indian Linguistics*, *23*, 72-81.

Appendices

A: Two-way pronominal affixation in NWIA
Sindhi: Kutjoms(kut+io+m+s)   (beat+PAST+1S+3S)*(I beat him/her)*
Khetrani:khiṯa:mʌs(khi + ta: + m+s) (beat+PAST+1S+3S)*(I beat him/her)*
Saraiki: mariemis (mar+ie+m+s)   (beat+PAST+1S+3S)*(I beat him/her)*

B: Pronominal Suffixes
Likhãs ɓethi(Likh+ã+s ɓeth+i)   I (F) am writing to him/her
    (Write+ 1SG+3SG ASP+1SGF)
Likhãsɓetho   (Likh+ã+s ɓeth+o)   I (M) am writing to him/her
    (Write+1SG+3SG ASP+1SG M)
Likhi lathoms (likhilath+om+s)   I (M/F) have written to him/her
    (Write ASP+1SG+3SG)

C: Subject object swap positions in Lasi

1st person(subject) – 2nd person(Obj)	2nd person(subj) -1st person(object)
Kute lathomae (kute+latho+m+ae)	Kute lathoaem(kute+latho+ae+m)
I have beaten you. (beat+ASP+1SG+2SG)	You have beaten me. (beat+ASP+2SG+1S)
Kutelathãĩm(kute+lath+ãĩ+m)	kutelathoms(kute+latho+m+s)
s\he has beaten me(beat+ASP+3S+1PS)	I have beaten him\her(beat+ASP+1PS+3PS)

D: Infixation in Lasi

Kute lathum wo I had beaten	kutelathowom I had beaten
(kute lathu+m wo)	(kutelatho+wo+m)
(beat ASP +1SG COPULA)	(beat ASP V+COPULA+1SG)
Kute lathaĩ wo(kute+lath+aĩ+wo)	kute lathawaĩ(kute+latha+w+aĩ)
S\he had beaten (beat+ASPV+3SG+COPULA)	S\he had beaten(beat+ASPV+COPULA+3SG)

E: Affixation with noun;

Lasi:	Saraiki
Genitive Singular putum (is my son)	**Genitive Singular:** putrim (is/are my son)
Genitive Plural putanum (are my sons)	

F: Negative Polarity Item;
Saraiki: nimismaria (ni+m+smar+ia) (Not+1SG+3SG beat+PAST) I have not beaten him/her
Lasi: Koti kutjã(kot+ikut+jã)
I(F) do not beat(NPM+SGF beat+PRESENT&1SG)
Koto kutjã (kot+o   kut+jã)
I(M) do not beat(NPM+ SG M   beat+PRESENT&1SG)

[152] *Morpho-syntactic Case changes in Middle Marathi: a Pilot study for an interdisciplinary research in Historical Linguistics* — Prachi Khandekar, University of Delhi, India

The history of Marathi evolution during the Middle Ages (1350-1800) is turbulent to say the least; there is language contact, shifting language loyalties due to change in the seat of political power, sociolinguistic attitudes, class struggle in the form of *Bhakti Movement* and the overthrow of the Sanskrit hegemony, recreation of a Sanskrit like decorated Marathi while the vernacular Marathi was flowing and evolving

unaware, organically. Under all these layers of socio political scenarios, my work aims at investigating Marathi as it was spoken in the street during the Middle Ages. For this, I will be implementing the traditional understanding of historical linguistics to Middle Marathi Data and then process it using modern day state-of-the-art data programming and visualization techniques. In the current day and time, it is essential that technology be used to achieve more sophisticated systems of historical analysis together with applying knowledge from the traditional methods.

My research is aimed at investigating case changes in Middle Marathi by looking at morpho-syntactic case markers that cause the resultant syntax of Modern Marathi as it is today (with a focus on Ergativity). For the pilot study, *Mahanubhav* documents from the said period were scanned and processed by Marathi OCRs that have recently become available, analysis units of sentences were manually searched for morpho-syntactic accusative case markers. Based on the results of this study, an algorithm is being formed to first identify the case markers and then plot the results using Python. This will enable the current researcher to then scan a huge number of historical documents and process them rapidly for the desired markers using computational methods of data processing. Thus, the projected idea is that it is likely that the trajectory of Ergativity in Marathi could be soon visualized as a line graph using a huge database that was otherwise difficult using manual scanning.

This work lies at the intersection of Historical Sociolinguistics, language change in New Indo-Aryan, Issues of Language politics and power, Medieval and colonial studies as well as computational approaches to treating data in Historical Linguistics. It also takes into account the use of secondary data for historical studies as I use the Folklore of *Tamasha, Lavani, Bhajan, Kirtan* and other such language resources in the absence of primary data; a serious problem faced by researchers in Historical linguistics.

In this paper, I present a preliminary set of results from the Pilot study of two *Mahanubhav* documents to begin the process of linguistic analysis based on traditional methods of historical inquiry followed by Masica, Emeneau, Cardona and Bloch. Based on these results, a possible algorithm is proposed that will serve as a guideline for Python programmers associated with this project. It is exciting to imagine the future of historical studies in Indo-Aryan linguistics that would result from such interdisciplinary studies.

References

Bloch, Jules (1970). *The Formation of the Marathi Language*. New Delhi: Motilal Banarsidass.

Burridge, Kate. & Bergs, Alexander. & EBSCOhost. (2017). *Understanding language change*. Milton Park, Abingdon, Oxon ; New York,: Routledge.

Chatterjee, Suniti Kumar. (1926). *Origin and Development of Bengali Language*, Calcutta: Calcutta University Press.

Deshpande, Madhav (1979). *Sociolinguistic Attitudes in India: An Historical Reconstruction*. Ann Arbor: Karoma Publications.

Downey, A. B. (2015). *Think Python*. Beijing: O'Reilly.

Emeneau, M. (1956). India as a Lingustic Area. *Language, 32*(1), 3-16. doi:10.2307/410649

Kasicheyanula Taraka Rama. 2009. *Computational methods for historical linguistics:* IIIT Hyderabad.

Masica, Colin P. (1976). *Defining a linguistic area: South Asia*. Chicago: University of Chicago Press

Naregal, Veena. 2001. *Language Politics, Elites, and the Public Sphere; Western India Under Colonialism*. New Delhi: Permanent Black.

Novetzke, Christian Lee. (2016). *The Quotidian Revolution: Vernacularization, Religion, and the Premodern Public Sphere in India*. New York: Columbia University Press.

Rege, Sharmila. (Mar. 16-22, 2002). *Conceptualising Popular Culture: 'Lavani' and 'Powada' in Maharashtra*. Economic and Political Weekly, Vol. 37, No. 11, pp. 1038-1047

Ringe, Don and Eska Joseph F. (2013). *Historical Linguistics: Toward a Twenty-First Century Reintegration*: Cambridge University Press.

Singleton, R., & Straits, B. C. (2010). *Approaches to social research*. New York: Oxford University Press. Chapter 12, pp.357-392.

Steiner Lydia, Stadler Peter F., Cysouw Michael. (2010). *A Pipeline for Computational Historical Linguistics.*
Trask, R. L. (2007). *Trask's Historical Linguistics*. 2nd ed., revised by Robert McColl Millar. London: Hodder Education.

[153] *South Asian Islamic Languages: a Culture-based Sprachbund?* ― Federico Salvaggio, University of Udine, Italy

The notion of an 'Islamic Linguistic Family' has been firstly proposed by the Italian orientalist Alessandro Bausani (1975) in order to gather together a group of languages that, despite their various genetic affiliations, at a certain moment of their history, appear "deeply influenced, lexically, graphically and to some extent also morphologically and even phonetically by the great cultural languages of Islam: Arabic and Persian". A parallel and independent development of the same notion, within the Islamic world, may be found in the works of the contemporary Malaysian philosopher Naquib Al-Attas (2005) according to whom the 'Islamic Language Family' embraces all those languages characterized by the presence of "a basic vocabulary consisting of key terms which govern the interpretation of the Islamic vision of reality and truth, and which project the worldview of Islam".

The 'Islamic Language Family', as conceived by the two scholars, cannot be considered a language family *stricto sensu* and should be rather treated as a peculiar case of culture-based Sprachbund which, besides some interesting convergences at the phono-morpho-syntactic level, mainly manifests itself at the lexical and semantic level thus producing a sort of common Weltanschauung that unifies those languages and justifies their inclusion into a specific language group.

On the basis of the comparison of the translations of some articles of the UN Universal Declaration of Human Rights (UDHR) into several South Asian languages[34] we will show how Qur'anic key terms (Izutsu 2002) play a fundamental role in differentiating between 'Islamic' and 'non-Islamic' South Asian languages. In languages historically related to Muslim communities in South Asia, such as Balochi, Pashto, or Urdu, the translation of the vast majority of abstract, educated, legal, and technical terms included in the UDHR is systematically based on the adoption of Islamic key terms that thus acquire a highly culturally connoted value and end up providing a unifying conceptual, symbolic, and hermeneutic framework for the interpretation of those texts by 'Islamic language' speakers in South Asia. Reflecting on these semantic convergences also represents an important occasion to deepen our understanding of how Muslim communities in South Asia look at their mutual connections not only from a strictly religious but also from a linguistic and cultural standpoint.

References.
Al-Attas S. M. N., 2005. "Islamic Philosophy: An Introduction", in *Journal of Islamic Philosophy 1*, pp. 34-35
Bausani, A., 1975. "Is classical Malay a Muslim language'?", in: *Boletín de la Associacción Española de Orientalistas* 11, pp. 111-121.
Izutsu, Toshihiko. 2002. God and man in the Qur'an: semantics of the Qur'anic Weltanschauung. Kuala Lumpur: Islamic Book Trust.

[154] *Indo-Aryan influence on Dravidian languages: the case of Marathi influence on Northern Gondi* ― Jessica Katiuscia Ivani, University of Kiel, Germany; Shubhangi Kardile, Deccan College, Pune, India

---

34   *www.ohchr.org/en/udhr/pages/searchbylang.aspx*

The Indian subcontinent is characterised by a rich linguistic diversity, with more than 400 languages reported and belonging to seven different language families (Simons and Fannig, 2018). Such complexity promotes multilingualism, code switching and code mixing. This paper aims to explore some aspects of language contact in South Asia, targeting Marathi (Indo-Aryan) and Gondi (South-Central Dravidian) study. Language data sources come from different fieldwork trips, conducted in Maharashtra, where Marathi is the predominant official language. Gondi settlements are scattered all over the Central area of the Indian subcontinent, with a significative presence in the eastern and north-eastern parts of Maharashtra. Data on Gondi has been collected, specifically, in Kelapur, Yavatmal district, in 2018.

Gondi speakers are bilingual in Gondi and Marathi, with Gondi restricted mostly to internal village interactions; Hindi is known among the most influencing members of the village. Marathi is used at every context, from casual village talk to official interactions. Gondi children speak fluently Marathi and show a tendency to use the state language in familiar contexts. They are, however, fluent in Gondi.

Such bilingualism reflects on the influence of Marathi language on Gondi, that can be seen on lexical, grammatical and phonological levels. The present paper focuses on lexical borrowing into Gondi, which cover any semantic domain, from numerals to body part terms and also grammatical borrowings including 'but', 'or', 'and', further to grammatical structures like comparative marker, conditional, and use of copula. A short sociolinguistic profile of the Gondi community in Yavatmal district will also be provided.

References

Emeneau, M. B. 1961. *Kolami: A Dravdian Language*. Annamalainagar: Annamali University
Krishnamurti, B. 2003. *The Dravidian Language*. United Kingdom: Cambridge University Press
Simons, G. F. and C. D. Fennig (eds.). 2018. *Ethnologue: Languages of the World, Twnety-first edition*. Dallas, Texas: SIL International. Online version: http://www.ethnologue.com
Steever, S. B. 1998. Gondi in S. B. Steever (ed.) *The Dravidian Languages*. London & New York: Routledge: 270-297

[155] *The 'Eastern' origin of diversity in India: Some linguistic evidence of migrations into the Northeast*
　　—Tanmoy Bhattacharya, University of Delhi, India

Commenting on the racial admixture that India has witnessed through the millennia, Suniti Kumar Chatterji considers the basic character of the Indian culture to be a composite, and in that light credits the Indian as one who "cannot but feel that he is more truly a cosmopolitan or international than representatives of most other people." [Chatterji 1951:2]

However, I will critically examine this concept in the context of Chatterji's proposal to consider "Indo-Mongoloid" as the term for the people of the North-East of India instead of the earlier term of *kirāt* used in Hindu texts, to rightfully situate speakers of Tibeto-Burman languages within the cultural milieu of India. I will argue that in fact, Chatterji's vision of a composite Indian culture is that of a homogeneous one. Furthermore, it will be argued that various genetic studies on human populations involving Y-Chromosome Haplogroups not only show the intrusive character of Tibeto-Burman speakers quite clearly but also establish the East as the origin of diversity.

This, I explore in the context of the observation, reported in Bhattacharya (2014, 2017), that on comparing Dravidian with Tibeto-Burman families of languages, we find numerous constructions like Negation, Tense-Aspect-Mood, Nominalization, Relativization, Nominal reflexives, Cleft constructions, etc., where these

two families are uncannily closer to each other. Such similarities attain greater significance in light of their differences vis-á-vis Indo-Aryan.

Though Phylogenetic analyses suggest that southern and northern groups have related mtDNA sequences and that northeastern tribes are quite distinct from other groups, the linguistic similarities identified above, hint at a different tale. In this paper I explore the new possibility that either: (A) the similarities are due to a systemic effect or, (B) carried over as a result of admixture through a different linguistic group.

In this connection, I explore here the thesis of the Eastern origin of diversity in the context of accounting for the uncanny similarity of the above-mentioned significant syntactic features across Dravidian and Tibeto-Burman. By taking recourse to the idea of a carrier, these two so-called unrelated groups could be shown to have interacted directly – a possibility that has not been previously considered. I will suggest this latter interaction as a distinct possibility if indeed Aryanisation of Eastern India happened much later than understood *and* that the East is the true melting pot of the region that witnessed the coming together of different civilisations. On considering the overall picture of the Y-Chromosome Haplotypes in India, one thing that becomes strikingly clear from the distribution is the extent of diversity in the east; as compared to any other region, which has as many as 12 Haplogroups present in one geographical area. This is indicative of a true melting pot; I take this to be a support for the hypothesis proposed here.

This "Eastern" diversity is contributed no less by the Austroasiatic (AA) and the Tibeto-Burman (TB). In this connection, it will be shown that the presence of AA in the Northeast and East is undeniable. This will be demonstrated via the presence of AA substratum of TB and cliticisation, the most celebrated supposed substratum influence. In addition, this is shown by the Mon presence culturally in Assam and Manipur and the genetic admixing in terms of presence of MI122. Therefore, it is quite likely that the two groups overlapped and went through/ settled in the NE at different times.

In terms of linguistic evidence, it will be shown that as far pronominalisation or argument indexing is concerned, there seems to be a gap in the northeast—the "middle" TB languages do not show argument indexation. This gap is perhaps matched by other alternative and tangential routes of movement that hidden in the shadow of more prominent and dominant migratory narratives. This gap is also matched by the presence of pockets of difference in an arc from Northeast Assam to Manipur valley—by Shan Vs. Kachin dichotomy played out in valley Vs. Mountain conflict that continues to the present day (Bhattacharya, 2018).

This set of evidence for the gap leads to a hypothesis: a separate migratory corridor earlier/ later of a different culture and language group; I will try to argue that this is presently supported by lack of argument marking (as above), and the conjecture that Meeteilon is not a Kuki-Chin language. The fact that Meeteis are genetically the closest to Phayengs, the original settlers of the valley than others, indicates their early presence in the valley.

In addition, I would like to claim that Chaterji's excerpts from the ancient Sanskrit texts repeatedly indicate existence of a water source, river, or most probably a sea, whenever the so-called Indo- Mongoloids are mentioned, suggesting that Tibeto-Burman races were occupying the greater part of Bengal all the way up to the eastern border of Odisha.

[156] *Areal features of the basic vocabularies of the languages of the South Odisha* — Anastasia Krylova, Russian Academy of Sciences, Russia; Evgeniya Renkovskaya, Russian Academy of Sciences, Russia

Our paper is based on the analysis of the 100-word Swadesh lists of different languages collected in the area of distribution of the Koraput Munda languages (Koraput, Rayagada, Gajapati districts of the state of Odisha, India) during the field trips of years 2016-2018). Linguistically, the area is a typical example of a linguistic micro-area in which Indoaryan, Dravidian and Munda languages speakers are settled compactly, and different idioms mutually influence each other. In fact, all the areas of the Munda languages are specific linguistic micro-areas, and the grammatical convergention processes in these areas draw attention of scholars for some decades [Osada 1991; Peterson 2010, 2017 etc.]. Our paper focuses on the lexical aspect. The research is based on Koraput Munda languages data including Sora (Lanjiya and Sarda dialects), Bonda (Hill and Lower dialects), Gutob and Didayi, but also languages of other families distributed in close proximity to the Munda communities including the Indo-Aryan idioms of Oriya, Pano (dialects of Gajapati and Rayagada districts), Desiya and Dravidian Telugu, Koya and Kui.

It is not unknown that Swadesh list words are not equally stable, and more than that, the stability of one or another lexical unit as well as their liability to certain semantic shifts depend on areal or genetic affiliation of the language. For example, the instability of the words meaning large internal organs of the body (e.g. „heart" and „liver" that are very liable to intermixing) is not only Indo-Aryan but a common typological feature. The intermixing of the verbs for „sleep" and „lie" is specific for Indo-Aryan languages in general. At the same time the denoting of „yellow" and „green" colors by the words for „turmeric" and „leaf" is to be considered an areal feature of the South Odisha, which is also true for the Dravidian word for „knee" replacing the original lexemes in both Indo-Aryan and Munda languages of the area. The percent of loanwords in the basic vocabulary may vary by dialects. The Lower Bonda Swadesh list contains more loanwords than the Hill Bonda, because the Hill Bonda area is less accessible for contacts.

The main goal of the research is to determine the most liable to borrowing words in the area, the directions of borrowing, the areal features of the basic vocabularies, calquing and other processes typical of words belonging to languages in a linguistic micro-area.

References

Osada, T. 1991. Linguistic convergence in the Chotanagpur area. S. Bosu Mullick (ed.), Cultural Chotanagpur. Unity in diversity. New Delhi: Uppal Publishing House. 99-119.

Peterson, J. 2010. Language contact in Jharkhand. Linguistic convergence between Munda and Indo-Aryan in eastern central India. Himalayan Linguistics 9/2: 56-86. http://escholarship.org/uc/item/489929c1

Peterson, J. 2017. Jharkhand as a 'linguistic area' – Language contact between Indo-Aryan and Munda in eastern-central South Asia. In: R. Hickey (ed.), The Cambridge Handbook of Areal Linguistics. Cambridge. pp 551-574

[157] *Corpus-based study of variation and language change in Kullui* ━ Julia Mazurova, Russian Academy of Sciences, Russia, Evgeniya Renkovskaya, Russian Academy of Sciences, Russia and Anastasia Krylova, Russian Academy of Sciences, Russia

Our paper describes the corpus of Kullui, a minor Indo-Aryan language of Himachali Pahari dialectal group also known as Western Pahari. The corpus is based on the fieldwork data collected in 2014-2018. The language is spoken by approximately 100 thousand people in the Kullu district of Himachal Pradesh, India. At the moment the corpus of Kullui includes more than 2500 sentences or 18000 tokens. The corpus includes both elicitated examples and samples of dialogues and monologues. When compiling the corpus, the ELAN program was used for the transcription of sound recordings, whereas morphological analysis and glossing were done with the help of Fieldworks Language Explorer (FLEx). Beside the text corpus, the FLEx project contains a lexicon of Kullui language (more than 2000 tokens). The lexicon includes not only words attested in the oral corpus, but also words collected from the informants using thesaurus list. Some

words, collected from other sources, for example, wordlists from (Ranganatha 1980; Thakur 1975), were checked with speakers. Part of this lexicon is not in active use anymore, but is very important from the point of view of historical and areal linguistics.

The corpus can be used as a tool for the investigation of the Kullui grammar and lexicon as well as its dialectal and sociolinguistic variation. More than that, the corpus is necessary for the documentation of this language, which has "vulnerable" status according to "UNESCO Atlas of the World's Languages in Danger". Nowadays fewer children learn Kullui as their first language, some families have shifted to Hindi in everyday use. Some of those who learn, acquire it imperfectly and are not fully fluent.

The paper deals with some important aspects of the corpus development such as 1) providing metadata according to the sociolinguistic situation (including age, gender, dialectal and social information); 2) the development of the practical phonetic transcription for Kullui (e.g., how to transcribe different realization of certain phonemes, especially middle vowels and affricates); 3) substantial grammatical and lexical variation.

Different types of variation are attested in the corpus: 1) dialectal variation in the different Kullu valley villages (forms of copula, analytical verb forms, imperative, terminative and mirative constructions, postpositions, pronouns etc.); 2) language change in grammar and lexicon due to the gradual language shift to Hindi (contact-induced changes and direct borrowing) can be attested in the speech of the younger generation in comparison to the speech of older people; 3) differences between more archaic variants of the remote villages and traditional folklore texts as compared with the everyday language of towns and nearby villages.

The corpus of a language belonging to the under-investigated group of Himachali Pahari is an important step towards the documentation and the research of these languages. Audio corpus with translation into Russian and English and search tools for grammar and lexical parameters can be used for the Indological, dialectological, comparative-historical and typological studies.

Bibliography

Ranganatha, M. R. 1980. *Survey of Mandeali and Kului in Himachal Pradesh. Census of India*. 1971. Language monograph No. 7. New Delhi: Office of the Registrar General, India, Language Division.
Thakur, M.R. 1975. *Pahari bhasha kului ke vishesh sandarbh men*. Dehli: Sanmarg Prakashan.

[158] *Sociophonetic conditioning of f0 range compression in diasporic Nepali communities* ─ Neelam Singh, EFL University, Hyderabad, India; Indranil Dutta, EFL University, Hyderabad, India

In this study, we report on sociophonetic conditioning of consonant dependent f0 perturbation and range in Nepali based on extensive contact with Maram, a tonal language. Cross-linguistically, voiced obstruents have been found to lower f0 in the following vowel (House and Fairbanks 1953). This lowering has been attributed to physiological and phonetic factors by few (Stevens2000, Atkinson 1978), while some argue that f0 lowering following voiced obstruents serves to maintain a phonological contrast between voiced and voiceless obstruents (Ohde 1984, Kingston & Diehl 1994). We show that while all Nepali speakers still maintain the f0 perturbation patterns expected in 4-way laryngeal contrast languages, the f0 range is significantly lowered for those speakers with extensive contact with Maram. Our findings lend support to the claim that while physiological and phonetic factors explain the expected f0 perturbation, long standing contact with tonal languages leads to f0 range compression.

We report on data from six male and six female native speakers of Nepali settled in Maram, Manipur, India. While, Nepali exhibits a 4-way laryngeal contrast; voiceless stops (VLS), voiceless aspirated stops (VLAS), voiced stops (VS) and voiced aspirated stops (VAS), Maram exhibits three lexical tones: high, mid and low. Following an extensive language background questionnaire, Nepali speakers were divided into three levels of proficiency in Maram; High, Medium and Low. Three repetitions of each word in a frame sentence were recorded under focal and non-focal conditions and analyzed using Praat. Time-normalized f0 contours were measured for 10 intervals into the vowel and these measures were subjected to z-score normalization to reduce subject effects. f0 range was measured as the difference between f0 maxima and minima for the 10 measures for the VS and VAS.

Our results indicate that f0 perturbation patterns follow universal claims, in that VAS lowers f0 more than VS, however, high level of contact and proficiency with a tonal language results in greater f0 range compression in VAS compared to VS. These findings lend support to the claim that physiological and phonetic factors determine f0 perturbation in the following vowel but sociophonetic conditions, such as high level of proficiency result in f0 range compression. We argue that sociophonetic conditioning can crucially impact diasporic Nepali speakers' f0 range, while maintaining automatic, physiological and voicing dependent conditioning of f0 perturbation, especially for speakers with higher levels of proficiency in a tonal language.

References

Atkinson, J.E. 1978. Correlation analysis of the physiological factors controlling fundamental frequency. *Journal of the Acoustical Society of America*, 63,211-222.

Hombert, J.M. 1979. Consonant types, vowel quality and tone. In *Tone: A Linguistic Survey*. V.A. Fromkin ed. Academic, New York, pp. 77- 111.

House, A. & Fairbanks, G.1953. The influence of consonant environment upon the secondary acoustical characteristics of vowels. *Journal of the Acoustical Society of America.* 25:1, 105-113.

Kingston, J & Diehl, R. 1994. Phonetic knowledge. *Language*. 70:3, 419- 454.

Ohde, R. 1984. Fundamental frequency as an acoustic correlate of stop consonant voicing. *Journal of the Acoustical Society of America*. 75, 224- 230.

Stevens, K. N. 2000. *Acoustic Phonetics*. MIT Press.

[159] *The fallacy of rhythmic holism: What Sora is really like* ─ Gregory D. S. Anderson, LTIFE, University of South Africa, South Africa; Opino Gamang, India; Luke Horo, Assam, India

This paper challenges the theory of Rhythmic Holism as a single linguistic phenomenon supporting a hypothetical South Asian 'Sprachbund' using data from Sora, a Munda language spoken in Assam and Orissa, India. In a series of papers, Donegan and Stampe (1983, 2002, 2004) and Donegan (1993) proposed that the prosodic/intonational features of Sora, and by extension the entire Munda language family, reflect a complete and total restructuring from a right-headed iambic (Weak+Strong) pattern to a left-headed trochaic pattern (Strong+Weak). Post (2011) extended this idea to Tibeto-Burman data. However, recent work by Horo (2018) and Horo and Sarmah (2015) as well as Ring and Anderson (2018), inspired by Auer's (1993) rejection of rhythmic typology, show that phonetic data, substantiated with instrumental analysis, in no sense support these assertions. In fact, as Horo (2018) and Ring and Anderson (2018) demonstrate, Sora itself–the basis of the purported all-encompassing and pervasive concept of rhythmic holism–reflects the original iambic Proto-Munda/SEAsian areal norm pattern, not a new, allegedly South Asia-typical trochaic Strong+Weak pattern. Thus, no complete re-setting of the parameters of prominence assignment from a Weak+Strong pattern has taken place, neither in Sora, nor in many other Munda languages. This means that we must abandon this unjustifiable assertion and re-examine the data in Sora and other Munda languages from a perspective that incorporates a more nuanced understanding reflecting a historically periodized

application and effect of South Asian areal 'norms' on the prosodic/intonational characteristics of Sora, and one that allows for the retention of archaic prosodic word features in combination with innovative South Asian areal prosodic norms. In short, the assignment of prominence to a particular syllable is, as in many languages, a diffuse and complex phenomenon in Sora, and one that has a range of phonetic cues or correlates, that includes, duration, intensity, f0, spectral tilt, etc. Indeed, in isolation, Sora disyllabic lexemes typically show an iambic pattern (Horo 2018), not the trochaic pattern that Donegan and Stampe would leave us to believe. Further, prominence in phrasal structures appears to peak on the second or third syllable in connected discourse in Sora with falls after these peaks (Ring and Anderson 2018). Hence, in no sense do word-level or phrase-level prosodic prominence features instantiate the claims of Donegan and Stampe, but rather reflect an archaic, and inherited system, of iambic-type prominence, and therefore do not reflect a wholesale accommodation to putative 'South Asian' areal norms, as asserted by Donegan and Stampe. In short, 'rhythmic holism', as a macro-parametric meta-feature, does not appear to be valid as an explanation in the developmental history of Sora, much less as a catch-all explanatory mechanism that purportedly accounts for all the rather varied phenomena attested not only in Sora–the alleged basis of the the application of 'rhythmic holism' in the first place–but also the various Munda languages like Gta' and Remo or some dialects of Santali for which no phase of trochaic structure can be attributed, and therefore do not seem to have *ever* undergone these defining processes of shift to trochaic structure. The only possible conclusion about these facts that are empirically valid, and thus not *a priori* stipulated realities, is that rhythmic holism has no analytical validity and as such must be abandoned in favor of a more periodized and nuanced approach to the historical analysis of the Munda languages, and one that includes not only the salient application of 'convergence' to areal norms, but also accepts that the accrual of 'typical' South Asian features happened across a span of time, with varied, but significantly distinct realizations, and indeed has never applied to certain languages like Gta'. We present original Sora speech (and comparative Munda) data on inflected and uninflected words as well as phrases, all controlled for focal intonation effects, in support of our claims.

References

Auer, P. (1993). *Is a rhythm-based typology possible?* KontRI Arbeitspapier Nr. 21, Universität Konstanz.

Donegan, P. J., & Stampe, D. (1983). Rhythm and the holistic organization of language structure. In J. F. Richardson, M. L. Marks, & A. Chukerman (Eds.), *Papers from the parasession on the interplay of phonology, morphology and syntax* (pp. 337-353). Chicago: Chicago Linguistic Society.

Donegan, P. J. (1993). Rhythm and vocalic drift in Munda and Mon-Khmer. *Linguistics of the Tibeto-Burman Area*, *16*(1), 1–43.

Donegan, P. J., & Stampe, D. (2002). South-East Asian features in the Munda languages: Evidence for the analytic-to-synthetic drift of Munda. In *Annual meeting of the berkeley linguistics society Vol. 28*, 111–120

Donegan, P. J., & Stampe, D. (2004). Rhythm and the synthetic drift of Munda. In R. Singh (Ed.), *The yearbook of south asian languages and linguistics* (p. 3-36). Berlin, Germany: Mouton de Gruyter.

Horo, L. (2018). A Phonetic Description of Assam Sora. PhD dissertation, Indian Institute of Technology, Guwahati.

Horo, L and Sarmah, P. (2015). Acoustic analysis of vowels in Assam Sora. In Konnerth, Linda, Stephen Morey, Priyankoo Sarmah, and Amos Teo (eds*.), North East Indian Linguistics*, *Vol. 7*, 69–86. Australian National University, Canberra: Asia-Pacific Linguistics.

Post, M. W. (2011). Prosody and typological drift in Austroasiatic and Tibeto-Burman: against "Sinosphere" and "Indosphere". In *Mon-Khmer Studies Journal Vol. 2*, 198–221. Pacific Linguistics.

Ring, H., & Anderson, G. D. (2018). On Prosodic Structures in Austroasiatic Diachrony: 'Rhythmic Holism' Revisited in Light of Preliminary Acoustic Studies. In Ring, Hiram, Felix Rau (eds.) *Journal of the Southeast Asian Linguistics Society, Special Publication No. 3,* 1–35. University of Hawai'i Press.

As noted by Zakharyin (2018: 108) Hindi-Urdu limits the grammatical relations that may freely be rendered by prenominal participials to two: Subject of intransitives (1) and Direct object of transitives (2):

(1) [[čal-tī]   gāṛī]-se   mat   kūdo, yāro!
      move-PresPrt train-from don't jump,   friends
      'Don't jump from a moving train, Guys!'

(2) pulis-ne   [[čurā-yā]   māl] bhī barāmad kiyā hai
      police-Erg steal-PstPrt goods too recovered done PresPerf
      'The police have recovered the stolen goods, too.'

The rendering of other grammatical relations, such as Locative or Genitive, while occasionally possible with Hindi-Urdu participials (Subbarao 2012, chapter 8) is preferably made using a different construction: nominalization (3b) or relative clause (3c):

(3a) ?[[aspatāl-se ghar ā-te]   din] ... =>   (3b) aspatāl-se   ghar ā-ne   ke din ...
      hospital-from home come-PresPrt day   hospital-from home come-Inf Gen day
      or => (3c) jis   din (X) aspatāl-se   ghar   ātā.hai ...
                   which day (X) hospital-from home   comes

(3abc)   '(On) the day that (X) comes home from the hospital ...'

However, Indo-Aryan languages spoken closer to the borders of Dravidian territory, such as Sambalpuri and Marathi, freely allow prenominal relativization on grammatical relations forbidden to Hindi-Urdu's participials:

(4) mui   sāṛhi de-ithibār tukel biha   hei-gola   Sambalpuri
     I.Nom sari   give-PstPrt girl's marriage be-WENT   Indirect object / Dative
     'The girl who I gave a sari to got married.'   (Sridevi and Choudhury 2001: 46)
(5) [[brahm.dev nighā-lel-i]   nābhi] ...   Marathi
     Brahma   emerge-PstPrt-Fsg navel   Source / Ablative
     'The navel from which Brahma emerged ...'   (vitthalrukminimandir.org)

Over and above the set of functions covered by Keenan and Comrie's Accessibility hierarchy, the structural "apparatus" of Marathi's prenominal participles is occasionally employed to render noun clauses:

(6) [[gharā-lā   āg lāg-leli]   bātmi] sarvatr pasar-l-i
     house-LocDat fire catch-PstPart news   all.over spread-Pst-Fsg
     '[The word [that fire had broken out in the house]] spread everywhere.'   (dainikekmat.com)

This use of participials to render noun clauses is a characteristic feature of Dravidian languages:

(7) [[atanu   cani-pō-yina] vārtalu] ...   Telugu
     he.Nom die-GO-PstPrt news
     'The news that he died ...'   (www.vidqt.com/...lang=te)

226

In our presentation we use this and other data to show that the extension of a linguistic area may occur "under the radar", as it were, with alterations in the functional range of existing constructions.

References

Keenan and Comrie. 1977. Noun phrase accessibility and universal grammar. *Linguistic Inquiry*, Vol. 8, Pp 63-100.

Sridevi, B.P., and Reshma Choudhury. 2001. Participialisation in Sambalpuri: A case for convergence. In Abbi, Gupta and Kidwai, Eds. *Linguistic structure and language dynamics in South Asia*. Delhi: MLBD. Pp. 41-47.

Subbarao, K.V. 2012. *South Asian Languages: A syntactic typology*. Cambridge University Press.

Zakharyin, Boris. 2018. Constraints on attributive functions of Hindi perfect participles manifesting the resultant state. In Ghanshyam Sharma and Rajesh Bhatt, Eds. *Trends in Hindi Linguistics*. Berlin/Boston: Walter de Gruyter.

[161] *Languaging online: Examining Romanagari as a contact phenomenon in Indian cyberspace* ─ Usha Kanoongo, Applied Linguistics, The LNM IIT Jaipur, India

Examining the everyday online languaging of the growingly digital Indians through a linguistic ethnographic approach, this paper discusses how Romanagari, as an imminent contact phenomenon, indexes the present day cyberspaced multilinguals' social interactions and the fluid and dynamic linguistic practices within.

Online spaces are emerging as new languaging spaces for multilingual users that permit flexible use of named languages and language varieties as well as other semiotic resources in order to materialize interpersonal communication, forge relationships build and identities. This ethno-linguistic diversity of the multiethnic and multicultural Indian subcontinent is evident, among other things, in creative multilingualism and resourcefulness in online texts like phonetic typing of words, Romanized transliteration, mixing of utterances from multiple languages along with utilizing multimodal features like graphics and emoji as tools for making meaning. Primarily three language varieties can be found in these discourses- Hindi, English and Romanagari- a portmanteau of Roman (script of English) and Devanagari (script of Hindi, Marathi, Bhojpuri, Rajasthani, Maithili etc.) referring to the words of Hindi (or other languages that use Devanagari script) typed using English language. Alternating between the three varieties is a common practice with users of these languages. This paper is grounded on the idea that this alternation is not just a case of Hindi-English code-switching but also an occasion of alternating between native and non-native cognitive processes that is manifested via a non-native script. Positioned at the interface of text and social practice, the paper conducts a linguistic ethnography (Rampton *et al*. 2014) of interactional data from a WhatsApp group of 37 extended family members, collected over a period of time. These individuals, men and women in the age range of 17 to 53 years, hail from a small town in Rajasthan and (most of them) have migrated to different places across the country for employment, education and other reasons. This paper aims to shed light on how Romanagari serves as a resource for coming together and languaging on the WhatsApp space. Methodologically, it extends the discourse analysis of text by moving beyond a purely textual level to a blended-ethnography approach (Androutsopoulos, 2008), combining the two techniques in a mutually complementary way- linguistic analyses and ethnographic description via observation of participants through questionnaire and interview responses.

Findings reveal that language users online draw on a variety of linguistic structures and strategies in order to negotiate social relationships and facets of group behaviour. Romanagari proves a powerful resource for constructing identity, indexing individual stance, performing cultures and building solidarity. Fulfilling a variety of functions thusly, its usage is contingent upon event and topic of communication, while also occasionally emerging as an unmarked behavior within the groups. The fluidity of languaging online often

227

emerges as a by-product of the fluid nature of the instant-messaging medium itself. The paper sheds light on the evolving linguistic practices concomitant with the emerging socio-contextual realities in the cyberspaced communities.

References
Androutsopoulos, J. 2008. Potentials and Limitations of Discourse-Centred Online Ethnography, *Language@Internet 5* (2008), article 9. (www.languageatinternet.de, urn:nbn:de: 0009-7-16100, ISSN 1860-2029)
Rampton, B. Maybin, J. and Roberts, C. 2014. Methodological foundations in linguistic ethnography. *Working Papers in Urban Language and Literacies* (Paper 125), King's College London.

[162] *Identifying Kasrod Malayalam as a bilingual mixed language* — Lakshmi Nair, The English and Foreign Languages University, Hyderabad, India

In this paper, I aim to distinguish that the language commonly spoken in Kasargod, the northernmost district in the state of Kerala in India, called 'Kasrod Malayalam'(henceforth referred to as KM) is a bilingual mixed language. A mixed language is one whose grammatical and lexical subsystems cannot all be traced back primarily to a single source language (Matras, Y., & Bakker, P. (Eds.). (2008)). The languages that concern my research are KM, Kannada and Malayalam.

The district of Kasargod in North Kerala is known as 'Sapthabhasha Sangama Bhumi' which translates to 'land of the confluence of seven languages'. As it is a part of the state of Kerala in South India, the official or administrative language of the district is Malayalam. But the convergence of different communities has caused the prevalence of six other languages in this region. These languages are namely: Kannada, Konkani, Urdu, Marathi, Tulu and Beary. The unofficial name given to the mixed language commonly spoken in the district is KM.

Kasargod borders the state of Karnataka on the north where the official language is Kannada. Both Kannada and Malayalam are part of the Dravidian family of languages that are mostly found in the southern part of India. As identified by Robert Caldwell, Dravidian languages are distinct from the ubiquitous Indo-Aryan languages that are found in the rest of the country (Caldwell, R. (1875)).
Along with Tamil, Kannada and Malayalam are languages that are derived from Proto-South-Dravidian. They also have influences of Sankrit and Prakrit.

Even though it is called KM, the language spoken in Kasargod has many similarities with Kannada. One feature that is prominent and quite distinguishing is the use of the phoneme /b/ instead of the phoneme /ʋ /. /ʋ / is more commonly used in Malayalam whereas /b/ is found more often in Kannada words.

The following are translations for the phrase 'don't want' in the three languages:

/ʋeɳɖɑ/ - Malayalam
/beɖɑ/ - Kannada
/beɳɖɑ/ - Kasrod Malayalam

One phonological distinction that Malayalam has in terms of its phonemic inventory when compared with Kannada is the presence of the phoneme /ɻ/, whose three-term label is central retroflex approximant. This phoneme is widely used in the Malayalam vocabulary. The phoneme /j/ features in the inventories of both languages.
KM omits the /ɻ/ and incorporates the /j/. The Malayalam word for path or road is /ʋəɻɪ/ whereas in KM it is /bəyɪ/.

The influence of Kannada isn't just phonological. There are many lexical influences as well. The word for fruit in Kannada /kɑjɪ/ is used instead of the Malayalam word /pəɻə̃m/. The word for banana in KM is /bɑjəkɑjɪ/ whereas in Malayalam it is /ʋaɻəpəɻə̃m/. This illustrates both the phonological and lexical influences of Kannada.

Morphosyntactically, KM seems to follow the patterns of Malayalam. A characteristic feature of Malayalam is that finite verbs are only inflected for tense. Other South Dravidian languages, including Kannada, inflect the finite verb for person, number, gender and tense. All morphemes are agglutinative. As is shown below, KM morphology is similar to Malayalam morphology

Kannada	Kasrod Malayalam	Malayalam
əʋənʊ bərʊ̱ṯṯɑjɪ̱ḏḏane	o:ɲɲə bərʊnnʊ	əʋən ʋərʊnnʊ
əʋəɭʊ bərʊ̱ṯṯɑjɪ̱ḏḏaɭe	o:ɭɭə bərʊnnʊ	əʋəɭ ʋərʊnnʊ

ʊ̱ṯṯɑ - present progressive tense   ʊnnʊ - present progressive tense
ɪ̱ḏḏ - singular
ɑne - masculine

Historically, the Kasargod region has been a part of the South Canara district of the Madras presidency under British rule. South Canara also included Udupi and Dakshin Kannada which are now districts in southern Karnataka. Kasargod officially became a part of Kerala on 1 November 1956. Until then, Kannada was the medium of instruction in schools. After 1956, educational institutions adopted Malayalam as 'first language'. This change has contributed to the colloquial language in the region. This paper will look at the contact of these two languages as well as the bilingual nature of natives. There will also be a focus on the historical, social and geographical impacts that have resulted in the creation of what is a bilingual mixed language that is predominant in Kasargod. I will present empirical as well as descriptive evidence to further my claim.

[163] *Evidentiality as an areal feature in the Himalayas: A Kurtöp case study* — Gwendolyn Hyslop, The University of Sydney, Australia

The grammatical encoding of information source, or 'evidentiality', is a known areal phenomenon. That is, we tend to see evidentiality as being a feature of linguistic areas and rarely is it found outside these areas. Notable areas for evidentiality include the Himalayas, Native North America, the Andes, and others (Aikhenvald 2004). However, these claims have yet to be tested widely with detailed data. In this talk we discuss the origin of the greater evidential system in Kurtöp, an endangered language of Bhutan, for the first time. Specifically we show that indeed some aspects of the system can only be attributed to borrowing, hence showcasing a mechanism by which evidentiality can become an areal feature.

Based on primary fieldwork in Bhutan, we use synchronic and comparative data to argue for the origins of the evidential and evidential-like system in Kurtöp. For example, there is a five-way contrast in perfective aspect. The form-*pala* is used when the speaker expects someone else to have first-hand knowledge of the event; -*para* is used when the speaker presumes that a given event took place; and -*mu* codes indirect evidence of an event. These forms contrast paradigmatically with -*na*, which marks the mirative (recent and surprising knowledge of an event, e.g. DeLancey 1997) perfective. The final perfective form, -*shang*, is used in egophoric (e.g. Tournadre 2008) contexts, when the speaker has privileged access to knowledge.

Perfective *-pala* and *-para* have their origins in recent grammaticalizations from nominalization constructions and *-mu* is inherited from an old auxiliary. Mirative perfective *-na* is recently grammaticalized from a copular auxiliary. Egophoric *-shang* has recently been borrowed from a Tibetan dialect.

In imperfective aspect, a Kurtöp verb contrasts new information with old, intrinsic knowledge. For example, upon discovering that water from a tap is cold, a Kurtöp speaker would utter *khwe khik-**ta***, but to relay that information to someone else, as an authority on the knowledge, would say *khwe khik-**taki***. Mirative imperfective *-ta* is a recent grammaticalization from the auxiliary 'become' and *-taki* is derived from this form.

Kurtöp has several copular roots: affirmative equational (*wen*), affirmative existential (*nak-*), negative equational (*min*) and negative existential (*mut-*) which are also obligatorily marked for evidentiality. The affirmative and negative equational copulas indicate direct evidence in their bare form, or may be altered to encode direct evidence, mirativity, intrinsic knowledge, presumption, or other values. The evidential and evidential-like markers on these copulas are also shown to be recent grammaticalizations from auxiliaries, such as 'become' (> mirativity).

In sum, we find that some categories in Kurtöp are pervasive throughout the grammar and also the result of transparent grammaticalizations within the language. Mirativity is the prime example of this. Other categories, on the other hand, are found only in one context, and also shown to be borrowings. Egophoricity, the prime example, is only found in perfective aspect and based on evidence from comparative data can only be attributed to borrowing. Thus, we have clear evidence for how areality in the domain of evidentiality and related categories can result from language contact and bilingualism. This in turn helps us understand the larger picture of 'linguistic areas', both in terms of the *types* of features subjective to borrowing and the mechanisms through which this borrowing may happen.

References
Aikhenvald, Alexandra. 2004. *Evidentiality*. Oxford/New York: Oxford University Press.
DeLancey, Scott. 1997. Mirativity: The grammatical marking of unexpected information. *Linguistic Typology* 1: 33-52.
Tournadre, Nicolas. 2008. Against the concept of "Conjunct"/"Disjunct" in Tibetan. In *Chomolangma, Demawen und Kasbek, Festschrift für Roland Bielmeier*, 281-308. International Institute for Tibetan and Buddhist Studies GmbH.

[164] *The dynamics of Differential Object-Marking in Nuristani, Dardic and Western Pahāṛī languages*
— Andrea Drocco, University of Venice, Italy

Thanks to the monumental works of many scholars (e.g., among many others, Grierson, Bailey, Morgenstierne, Van Driem, Zoller, LaPolla, Saxena, Noonan, Schmidt, Strand, etc.), we have a good knowledge of the accentuated linguistic variety of the whole Himalayan band (Filimonova 2005, Liljegren 2014) characterized by the coexistence of languages of different subgroups (Nuristani, Dardic and Pahāṛī languages) and also of languages of different language families (especially Indo-Aryan and Tibetan-Burman). Despite this evident interest, much work still needs to be done, both to identify and document these languages, to understand the possible effects of the persistent and close linguistic contact between these languages, and also their genetic relationship. Recently, Zoller (2011, 2016), starting from Southworth's discussion (2005) of Grierson's original Inner-Outer hypothesis (1927: 115-120), argues the existence of a third trajectory of Indo-Aryan linguistic diffusion. According to him, this trajectory begins in the Hindu Kush and extends through the Karakorum and the Himalayas up to the south-eastern border of Nepal. The peculiarities of this third trajectory are very visible in the area of the Nuristani, Dardic and

Western Pahāṛī languages and they are not shared by the neighbouring languages. The aim of the present talk is to illustrate another feature, not taken into consideration by Zoller and other scholars, common to these languages: the strategies of Nuristani, Dardic and Western Pahāṛī languages, different from the majority present-day IA languages, with respect to the differential object marking. Indeed, if it is true that one of the distinguish features of New Indo-Aryan languages, and one their true innovations, is the differential object marking in perfective and non-perfective tenses (Klaiman 1987, Masica 1982, 1991), it is also true that this phenomenon does not occur in all Indo-Aryan (as regards Kaśmīrī see Hook & Kaul 1989, Koul & Wali 1997) and, as we will show, some of those languages where it does not occur have some features in common. This is the case of the Nuristani, Dardic, some Western Pahāṛī languages and also some Iranian languages spoken in north-western South Asia. In these languages, in the presence of a perfective verb form, the Object-like argument of a transitive sentence is never followed by any case marker and thus occurs in its absolutive case: this is true for both pronouns and nouns. On the contrary in non-perfective tenses the same argument can be marked following different modalities and different marking according to the language taken into examination. In the conclusion the talk will illustrate also the difficulties in order to understand the underpinnings of this common feature. Is it explicable as a consequence of linguistic contact or as the retention of an archaic common feature? Or, on the contrary, it is the result of a casual convergence of a non-correlated common feature.

References

Filimonova, E. 2005. 'The noun phrase hierarchy and relational marking: Problems and counterevidence', *Linguistic Typology* 9(1): 77-113.

Grierson, G. A. 1927. *Linguistic Survey of India, Vol. I, Part I: Introductory*. Calcutta: Government of India Central Publication Branch.

Klaiman, M. H. 1987. 'Mechanisms of ergativity in South Asia', *Lingua* 71: 61-102.

Koul, O. N. & Wali, K. 1997. *Kashmiri. A cognitive-descriptive grammar*. London-New York: Routledge.

Hook, P. E & Kaul, V. K. 1989. 'Case alternation, transitionality, and the adoption of direct objects in Kashmiri', *Indian Linguistics* 48: 52-69.

Liljegren, H. 2014. 'A survey of alignment features in the Greater Hindukush with special References to Indo-Aryan', in Suihkonen, P. & Whaley, L. J. (eds.), *On Diversity and Complexity of Languages Spoken in Europe and Central Asia*, Amsterdam: John Benjamins, 133–174.

Masica, C. P. 1982. 'Identified object marking in Hindi and other languages'. In: Koul, O. N. (ed.), *Topics in Hindi linguistics*, vol. II. New Delhi: Bahri Publications, pp. 16-50.

Masica, C. P. 1991. *The Indo-Aryan languages*. Cambridge: Cambridge University Press.

Southworth, F. C. 2005. *Linguistic Archaeology of South Asia*. London – New York: RoutledgeCurzon.

Zoller, C. P. 2011. 'Pahari (in Russian)'. In: G. A. Zograph, T. I. Oranskaia, L. I. Kulikov, P. K. Pandey (eds.), *Languages of the world: The New Indo-Aryan languages (Jazyki mira: novye indoarijskie jazyki)*. Moscow: Academia, pp. 195–218.

 2016. "Outer and Inner Indo-Aryan, and northern India as an ancient linguistic area". *Acta Orientalia* 77: 77-132.

[165] *A comparison of the negative TAM encodings of Pnar, Khasi, War and Lyngam (PWL) with Munda and with other Austroasiatic negations and the hypothesis of a Munda-PWL common ancestor* — Anne Daladier, LACITO, CNRS

I shall present the different and rich TAM negation systems of Pnar, War and Lyngam of NE India and compare these interactions and encodings with Munda and with mainland AA languages.

The Khasi simple negation system is a fading of the Pnar one and more generally Khasi appears to be a very recent offshoot of Pnar. The Khasian group has been redefined as Pnaric-War-Lyngam (PWL) in Daladier (2011).

Negation-TAM encodings show that each of the Pnar, War and Lyngam languages have been in contact with different Munda languages, Anderson and Jora (2018). As specific languages are concerned these Munda-PWL contacts are rather recent, before Meghalaya became a refuge land for this group (due to the Tai Ahom settlement in Assam and to the Moghul settlement in Bangla in the 15th c.).

But the fact that negation and TAM interact in PWL as in proto-Munda and the fact that their common negative TAM markers are found in mainland AA languages adds information to trace back a possible early common ancestor.

In Pnar, War and Lyngam, this interaction is linked to the lack of argument indexing, a conservative feature in AA, as it is in Sino-Tibetan, see LaPolla (2003). This interaction is also found, but to a lesser degree, in Kammu and Semlai and as relics in Palaung, Old Khmer, Old Mon, Bahnaric languages and Car-Nicobarese. Kruspe (2004:§10.4, §10.6.3 and §13.2) especially analyses the interaction of negations with TAM encodings and the expression of negative attitudes. Semantic switches of common AA negation markers in different groups also show long term changes.

There are other common typological features in Munda and in PWL, especially differential markings of core arguments and rich serial constructions. In War, serial constructions involve lexical predicates beyond part of speech categories, providing kind of voice, valency changes and TAM values but also subjectivity values referring to SAP, Daladier (2012). These subjectivity values referring to SAP are complementary to those expressed in the differential marking of core arguments, Daladier (2016). So, I relate TAM-negation interactions to preverbal assertive systems. Negative TAM and negative injunctions or grammaticalized negative attitudes in Munda, in PWL and in other AA languages might be relics of former AA preverbal systems or rather former AA assertive systems with flexible nominal/verbal functions. Negation-TAM interactions are also found in Ladakhi (Tibetic), Sharma (1998).

Assuming the Munda contact analysis of John Peterson (2017) and the reconstruction by Matissoff (2003) of a substantial AA substratum in Himalayan Sino-Tibetan languages, I hypothesise that an ancestor of Munda -PWL might have been settled in a sprachbund extending between Assam and the gulf of Bengal perhaps also including the India-Burma boarder before the spread of Sino-Tibetan groups.

References
Anderson, G. 2007 *The Munda verb*, Mouton
Anderson, G. ed., 2008 *The Munda languages*, Routledge Language Family Series
Anderson, G. and Jora, B. 2018 « Negation, TAM and Person-Indexing in the Munda Languages: A Preliminary Report », Papers from the 7th ICAAL Conference, JSEALS : 36-59
Daladier, A., 2011 "The group Pnaric-War-Lyngngam and Khasi as a branch of Pnaric", JSEALS 4-2, 169-206
_____2012 "Graded Passive and Active Values, in Serial Constructions in War", in North East Indian Linguistics, Vol. 4, Eds. Hyslop, Morey, Post, Delhi:Foundation/Cambridge U. Press, 373-403___
_____2016 "The Counting Unit System of Pnar, Khasi, War and Lyngngam and its traces in Austroasiatic Composite Cardinal Systems" in *North East Indian Linguistics 7*, Eds. L. Konnerth, S. Morey, and A. Teo, Canberra: Asia-Pacific Linguistics
_____2016 "The Differential marking of arguments and the grammaticalisation of subjectivity values in War" in *North East Indian Linguistics 7*, eds. L. Konnerth, S. Morey, and A. Teo, ark W. Post eds., Canberra: Asia- Pacific Linguistics, Open Edition
Guilleminet P. 1963 *Dictionnaire Bahnar-Français*, Paris: EFEO
Jacob, J. 1993. « A Diachronic Survey of some Khmer particles (7th to 17th Centuries) », Cambodian Linguistics, Literature and History, London: SOAS
Jenny, M and Sidwell, P. 2014, *The Handbook of Austroasiatic languages*, Brill
Kruspe, N. 2004 *A Grammar of Semelai*, Cambridge: Cambridge University Press

LaPolla, R. 2003, 2017 "Overview of Sino-Tibetan Morpho-Syntax" in *Thurgood, G; LaPolla, R. (eds.), The Sino-Tibetan languages, London: Routledge, pp. 22–42*

Manley, T. 1972 *Outline of Sre Structure*, Hawaii: Oceanic Linguistics

Matissoff, J. 2003 Handbook of Proto-Sino-Tibetan System and Philosophy of Sino-Tibetan Reconstructions. Berkeley: University of California press

Milne, L. 1921 *An Elementary Palaung Grammar*, London: Oxford U. Press

Peterson, J. 2011 *A Grammar of Kharia, a South Munda Language*, Brill's Studies in South and Southwest Asian Languages

_____ 2017 « Fitting the pieces together. Towards a linguistic prehistory of eastern-central South Asia (and beyond) », *Journal of South Asian Languages and Linguistics, 4(2). 211-257.*

Sharma, D. 1998 Tribal languages of Ladakh, Mittal pp.103-104

Shorto, H. 1971. *A Dictionary of the Mon Inscriptions*, London: Oxford U. Press

Shorto, H. 2006. A Mon-Khmer Comparative Dictionary, Canberra: Pacific Linguistics

Svantesson, J-O, 1983. *Kammu Phonology and Morphology*, Lund CWK cleerup

[166] *Is double (or manifold) language areal belonging conceivable for a language ? The case of an Indo-Aryan language in diaspora – Rromani* ― Marcel Courthiade, INALCO, Paris

Research in areal linguistics has classically focused on languages of settled populations. The notion of *Sprachbund*, launched mainly by Nicolas Troubetzkoy (1923) and Kristian Sandfeld (1926), arose from Balkan linguistic material – the transversal similarities of which had been first noticed one century earlier by Jerenj Kopitar. Later observations proposed the existence of local subdivisions within the Balkan – as this was also suggested separately for South Asia language area. The presentation deals with a somehow inverse approached, ensuing from the observation of the specific case of the Rromani language: on the one hand it was historically rooted in the Indian language area and Annie Montaut's ten pan-Indian features, applied to Rromani, are discussed here, whilst on the other it is a member of the Balkan *Sprachbund* and its belonging to this language area, in its quality of "new-comer", is also surveyed. Noticeably the membership of Rromani in both language areas is taken on account comparatively late in academic works. Some specific evolutions and correspondences are mentioned, mainly in the verbal field (medio-passive, infinitive, endings). In addition features acquired later, under contact languages influence outside the Balkan area, are also surveyed. A short discussion is devoted to Paul Wexler's notion of *Wandersprache* (2006), as applied to Rromani.

The case of Rromani is not very common worldwide but it allows to check the mechanism of integration to a language area: as an age-old member (as Rromani in the Indian area) and as a new-comer (as Rromani in the Balkan). It gives also hints about the stability and/or sustainability of traits acquired in both situations, including after leaving the areas under discussion. In fact ancient features (brought from India) result more resistant to erosion and changes than transitional features (acquired in the Balkan) – in parallel with the fate of lexical items: inherited lexemes are comparatively more resistant than loanwords, even when the Rromani speakers are not anymore aware of their respective status and view them all as "Rromani words".

[167] *A Panorama of South Asian Relatives: A Case of Structural Convergence, Divergence and Innovation* ― Karumuri V. Subbarao, University of Delhi, India

This paper attempts to study variation, structural commonalities and innovations made in the formation of full-fledged and participial relative clauses in Tibeto-Burman languages, Dakkhini Hindi-Urdu (Indo-Aryan), Bhālāvali Bhasha and Mangalore Konkani (Indo-Aryan). We provide data that show that in contact

situations, a language may use the Juxtaposition strategy as a means to express modification, as is the case in Nagamese and the Konkani spoken by the Indian diaspora in South Africa.

While Tibeto-Burman languages lack full-fledged relative clauses indigenously, there is a select set of languages (Angami Sema, Khezha, Konyak, Ao (Mongsen, Chanki and Chungli, etc. spoken in Nagaland) that has full-fledged relative clauses. We argue that Nagamese, a modified form of Assamese (Indo-Aryan) used as a lingua franca in Nagaland, functions as a trigger and catalyst in the formation of relative clauses in the select set of Naga languages.

Further, the Kuki-Chin languages and the Naga languages have Externally-Headed Relative Clauses (EHRCs) and Internally-Headed Relative Clauses (IHRCs). The internal head in the IHRCs in Kuki-Chin languages does not carry any postposition while the head in the IHRCs in Naga languages invariably does. (Subbarao 2012).

The structure of the full-fledged relative clauses in Dravidian is distinct from the structure of the full-fledged relative clauses in Indo-Aryan. All Dravidian languages utilize the question word as a relative pronoun, and they also use the complementizer *-ō*[35] as a linker to link the embedded relative clause with the matrix clause. Further, Telugu and possibly, the other Dravidian languages have a second type of relative clause construction in which the matrix clause and the embedded clause are linked by the clitic *-ē-* and there is an absence of either a relative pronoun or a question word in such sentences. Such clauses are similar in structure to the Juxtaposition clauses except for the fact that the verb of the embedded relative clause carries the clitic *-ē-* that also functions as an emphatic marker.

We provide data that show that in Mangalore Konkani, Bhālavali Bhāshā and Dakkhini, the transplanted varieties of standard Konkani, Hindi-Urdu and Marathi respectively in the Dravidian language speaking area, (i) a question word of Indo-Aryan is used as a relative pronoun, and (ii) either *ki* 'that', an IC (Initial Complementizer) of Indo-Aryan, reanalyzed as a post-sentential linker in Dakkhini and Konkani or a question word is used as a linker in Bhālavali Bhāshā relative clauses and embedded questions.

Thus, when a language that lacks a specific construction-type indigenously comes in contact with another language that has the specific construction-type that is novel to it, it is likely to borrow the construction type and then, make further innovations. Such innovations:

(i)   may utilize some functional categories that are already available in the language as is the case in Dakkhini and Mangalore Konkani and the select set of the Naga languages spoken in Nagaland and,
(ii) may also impose some specific conditions on the novel construction, as is the case in Dakkhini and Mangalore Konkani in not permitting rightward extraposition of the embedded relative clause to the right, though the parent language does.

We demonstrate that the Principle of *Optimal Utilization* of functional categories plays a dominant role in structural borrowing.

References

Subbarao, K. V. 2012 a. *South Asian Languages: A Syntactic Typology*. Cambridge. New York, & Delhi: Cambridge University Press.

---

[35] The linker (complementizer *-ō*) also performs several other functions such as a disjunction, a complementizer in embedded questions and a marker of doubt labelled as a dubitative marker.