Multiple cues to focus
Amalia Arvaniti, Evangelia Adamou, and Argyro Katsika

Research on the syntax and pragmatics of focus often assumes that focus is associated with prominence, which is often in its turn said to be realized as high or rising pitch. In this view, phonetic details such as the distinction between high and rising pitch are seen as immaterial and often discarded. On the other hand, in the autosegmental-metrical framework used to study the intonation of focus, the existence of distinct pitch accents denoting focus is accepted; the differences between them are said to depend on the realization of pitch, especially differences in the alignment of tonal targets. The importance attributed to such differences leads to little tolerance for variability and has given rise to standing disagreements, e.g., as to whether English has a H* ~ L+H* contrast.

We used a corpus of Romani spontaneous and semi-spontaneous data from 12 speakers of Greek Thrace Romani to examine the syntactic and phonological properties of focus. The data indicate that Romani uses two accents, H* for new information, and L+H* to indicate contrastive focus. The two accents are by and large distinguished by differences in pitch: H* is realized as a fall within the stressed syllable; L+H* shows a marked rise before the fall. These differences, however, are not always present in exactly this form: e.g., L+H* may be realized as a long plateau or as a fall from markedly high pitch. Further, phonetic parameters beyond pitch play a part in the realization of each accent: e.g., L+H* is accompanied by longer accented syllable duration. Finally, not all parameters need be present for the accent to be successfully identified. A very similar picture emerges from the study of a Greek corpus in which speakers read sentences in contexts leading to the realization of the focal accent as H* (new information), L+H* (contrastive focus) or H+L* (information considered by the speaker to be in the common ground and thus obvious): multiple cues, not of all which were constantly present were the norm.

The variable phonetic realization of accents and the use of multiple (and thus redundant) cues in both Romani and Greek is in line with the view that a principled distinction must be maintained between the phonetics and phonology of intonation. Intonation should be treated as a component of phonology to which standard diagnostic criteria apply: attention should be paid not only to the phonetic details of accent realization but also to pragmatic meaning when establishing intonation contrasts, while intonation contrasts should not be collapsed when studying focus from a semantic or syntactic perspective. Finally, the idea that intonational contrasts are based exclusively on differences in pitch or that target alignment is the primary cue to accent should be abandoned in favour of a more nuanced view of the realization of intonation that takes into account both the autosegmental (f0-related) and the metrical (prominence-related) component of the AM framework and their associated phonetic exponents.
Information structure in a spoken corpus of Cameroon Pidgin English

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Cameroon Pidgin English (CPE) is an expanded pidgin/creole spoken in some form by an estimated 50% of Cameroon’s 22,000,000 population (Lewis et al. 2014), primarily in the Anglophone west regions, but also in urban centres throughout the country. As a primarily spoken language, CPE has no standardised orthography, but enjoys a vigorous oral tradition, not least through its presence in the broadcast media. However, it resists close documentation due to its stigmatised status in the face of French and English, prestige languages of Cameroon, where it also co-exists with an estimated 280 indigenous languages (Lewis et al. 2014).

We are in the first year of a two-year, British Academy/Leverhulme-funded project aimed at constructing a 240,000-word pilot corpus of transcribed spoken CPE dialogues and monologues, with partial POS-tagging, glossing and translations.

As a testing ground for the pilot corpus methodology, we constructed a small, 120,000-word ‘pre-pilot’ corpus consisting of (i) spoken CPE (Ayafor, Green and Ozón, in prep.), (ii) existing published sources (Ayisi & Longinotto 2005; Bellama et al. 2006; Todd 1979), and (iii) elicited examples. This pre-pilot corpus was designed to test our approaches to recording, transcribing, coding and devising a POS-tagset (and tagging system).

Drawing on this pre-pilot corpus, we report on the methodological stages for investigating information structure in CPE, which we identify as the following:

I. **Elicitation** of representative examples of topic and focus constructions. For example, question-answer pairs for the identification of new information focus (1), and assertion-correction pairs for the identification of contrastive focus (2), as well as cleft constructions (3). This allows the identification of function words and word orders associated with focus and topic constructions, such as copulas and relativisers.

II. **Extracting** the set of utterances containing the relevant function words (or n-grams containing those function words) from a corpus of naturally-occurring language.

III. **Coding** those utterances to separate topic/focus constructions from other grammatical constructions containing the same function words (4), (5).

IV. (a) The identification of recurring **construcational patterns** involved then offers the potential for automatic retrieval (6). This also allows (b) the identification of overt markers of **contexts** in which e.g. focus constructions are likely to occur, e.g. question/answer pairs.

V. The resulting dataset is then available for prosodic analysis.

We identify a number of methodological challenges, including the following:

- **Orthography**: the lack of a standardised spelling system conspires against automatic token retrieval. Cross-checking transcriptions becomes an expensive necessity in the absence of a pre-existing annotation scheme.
- **Multifunctionality**: the expression *na*, which serves both as a copula and as a focus marker, is extremely frequent, requiring the manual coding of over 3,000 tokens from our 120,000-word pre-pilot corpus.
Multifunctionality: similarly, the expression fo, which functions as topic marker, preposition, and infinitival particle, is also extremely common, requiring the manual coding of over 5,000 tokens.

Examples

(1) Q: (na) fo hu i bi gif de chop?
   COP PREP who(m) she ANT give DEF food
   ‘Who did she give the food to?’
   A: i bi gif de chop fo yi boi-pikin object focus (new information)
   she ANT give DEF food PREP her boy-child
   ‘S/he gave the food to his/her son.’

(2) Q: i bi bai tomato, no bi so?
   she ANT buy tomatoes, NEG be so?
   ‘She bought tomatoes, didn’t she?’
   A: no-oh, na banana i bi bai object focus (contrastive)
   no, COP bananas she ANT buy
   ‘No, s/he bought bananas.’

(3) na wit cane weh yu bit yi cleft
   COP PREP cane REL you beat her
   ‘It was with a cane that you beat her?’

(4) yi nem na Atiqu copular clause
    his name COP Atiqu
    ‘His name was Atiqu.’

(5) sumo ting weh a wan tok relative clause
    small thing REL I want say
    ‘something I want to say.’

(6) (na) NP (weh) NP (TMA) V ex-situ object focus schema

Abbreviations

ANT = anterior tense; COP = copula; DEF = definite determiner; NEG = negation; PREP = preposition; REL = relativiser.

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It has been taken as axiomatic that *wh*-phrases are (A) categorically not topics (e.g. Kiss 1998) and (B) always carry focus (see references in Cable 2008). In this paper, I will explore data that challenge both of these ideas from three related Austronesian languages: Eastern Cham, Western Cham, and Moken, where information structure acts orthogonally to *wh*-fronting. Along the way, I illustrate how multiple genres of text collection, from narratives to semi-spontaneous discourse and elicitation are all needed to account for these phenomena (cf. Mithun 2014). Additionally, I show the benefit of incorporating data from multiple closely related languages and dialects (cf. Kaisse 2014).

Eastern Cham, Western Cham, and Moken are all isolating, SVO, *wh*-in-situ languages spoken in Vietnam, Cambodia, and Thailand, respectively. In Eastern Cham, information structure is marked by two fronting constructions: a topic-like construction (“topic” in the Cham literature, cf. Brunelle & Văn Hẳn 2015) and an identification focus cleft (Kiss 1998, Aissen 2015). *Wh*-phrases may appear in both constructions (1a) or in-situ (1b).

(1a)  *kêt* // *thay* *hu* *plày*[^2]  (1b)  *thay* *plày* *kêt*
what who FOC buy who buy what
‘Who is it that bought what?’ ‘Who bought what?’ [Eastern Cham]

To address claim (A), I turn to narrative and semi-spontaneous discourse data, which shows that the topic-like construction marks discourse anaphora (as per López 2009’s account of clitic dislocation in Romance), in the absence of any other topic construction. As for claim (B), nearly identical data from Western Cham confirms that the topic-like construction occupies a functional projection (overtly marked by *kiŋ*). This proves that *wh*-phrases may mark both topic and focus (2). Lastly, data from Moken shows what occurs when there is an active *wh*-feature (marked by =laː). Superiority effects obtain (cf. Stepanov, Fanselow & Vogel 2004) (3a), but *wh*-phrases may still occupy both the topic and focus slots (3b).

(2)  *hag* *ɛt* *kiŋ* *say* *hu* *blay*  (3a)  *acaː:*=laː *anoː:*=laː *ŋə* *maneʔ*
what TOP who FOC buy who=Q what=Q FOC ask
‘Who is it that bought what?’ ‘What is it that who asked?’ [Western Cham]

(3b)  *anoː:*=laː *olan* *ŋəʔ* *mətok*
what=Q snake FOC bite
‘It is the snake that bit what?’ [Moken]

Taken together, this data encourages the study of information structural phenomena as unitary before incorporating similar, but potentially orthogonal phenomena like *wh*-fronting (Cable 2008). Eastern Cham, Western Cham, and Moken all demonstrate dramatic decoupling of the two.
1. Data for this paper come from the author’s fieldwork with four native speakers of Eastern Cham, one native speaker of Western Cham, and a corpus of Moken data from Peter Jenks’ fieldwork (see, Jenks 2008), compiled by the author.

2. Note the pause that separates Eastern Cham dislocated constituents, but not foci; writing system is IPA, with grave accents marking low, breathy tone.

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Challenges in Developing an Information Structure Analysis of a Lesser-Known Language: Prominence and Phrasing in Samoan

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In this paper, I present findings from recent experimental work looking at the prosodic and syntactic marking of information structure in Samoan, an Austronesian VSO language. Two studies are reported on, the first looking at focus marking in Samoan (Calhoun, in press), and the second at syntax-prosody mapping in focus-sensitive constructions, including sentences with na‘o (‘only’) and equatives (Calhoun, under revision). I argue that the results of these studies show that, while Samoan appears to use primarily syntactic means to mark focus (in an initial cleft), focus marking in Samoan in fact fits well with the generalisation that focus should be maximally prominent (cf. Truckenbrodt 1995, Büring 2009). The results of the latter study suggest that the prosodic structure of Samoan gives a window into the deeper functional organisation of the language into predicate and subject. These arguments rest on my claim that the initial phonological phrase is the position of default prominence in Samoan, hence aligning with the usual position of the focus, and the predicate. I present evidence for this claim, along with a number of prosodic features of Samoan that apparently challenge this analysis. I will show that these features can be explained within my proposal, drawing on evidence of related prosodic phenomena in other languages.

In my discussion, I will link the development of my analysis to the themes of the conference: how to interpret prosodic phenomena involving the interaction of multiple linguistic levels in the absence of native speaker intuitions and rich data about these levels typically available for more studied languages. Those with the skills and experience in documentary linguistics are not necessarily those who, like myself, have the skills and experience in the analysis of prosody and information structure. Prosody and information structure are complex areas of any language which rest on a good understanding of other linguistic levels, including syntax, morphology and phonology. However, we are currently in a better position than ever to make cross-linguistic generalisations about prosodic structure, as our understanding of this area has matured within the Autosegmental-Metrical framework (Ladd 1996, 2008). Further, as I will argue my Samoan data shows, information structure can illuminate our understanding of syntax. These methodological challenges are, therefore, very worthwhile to overcome.

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Peripheries in Zaar Intonation Structure
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When annotating authentic corpora, the role of peripheries in Information Structure (IS) is one of the main issues to be addressed. The left periphery (LP) is the preamble (Morel & Danon-Boileau 1998) and the right periphery (RP) is the post-rheme. In Zaar, a West-Chadic language spoken in Nigeria, they are identified as intonation units separated from the rhyme (or assertive core) by an intonation boundary (pause, pitch reset, etc.). The notions of Focus and Topic and focus become pertinent when a ‘chunk’ is identified as a Left-Periphery intonation unit, outside the assertive score, and its IS status needs to be decided.

The phenomena are analysed according to the principle that focus and topic are to be apprehended as the results of specific linguistic structures (i.e. focusing and topicalising). They are studied “from the bottom up”, NOT as the manifestation of extra-linguistic concepts such as given/new. In Zaar, the preamble is where topic and focus operate, with or without contrast. The post-rheme is where afterthoughts and major illocutionary functions (e.g. questions, exclamations, etc.) are expressed.

The paper explores the results of the study of these phenomena in Zaar, presenting how the IS has been annotated in Elan, and a typology of the different peripheries. The study is based on the annotation of a 90mn spontaneous oral corpus produced for the CorpAfroAs and Cortypo projects.

References


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The Neo-Aramaic dialect of Telkepe was until last year spoken by Chaldaeans/Assyrians living in the small town of Telkepe near Mosul in Iraq. Since the conquest and ethnic cleansing of this and other Christian villages by ISIS, the endangerment of the dialect has increased.

The following study of information structure forms part of a larger documentation of this dialect. Information structure is expressed via the position of the nuclear stress in the intonation phrase in conjunction with word order: the former is more decisive than the latter. In addition, topical objects are marked as such by the presence of an object index on the verb and in many cases a dative preposition flagging the object NP. Other than this differential object marker, there is no case marking in this or any other Neo-Aramaic dialect. There are also no (in)definite articles, except for the numeral ‘one’, which is sparingly used for indefinite specific nouns playing a significant role in the discourse (English ‘a certain’).

Pronominal subjects and objects are normally expressed by argument indexing on the verb alone, but independent pronouns may additionally be used, in particular to bear stress for focus or for contrastive topics. When nominal arguments appear, these may be indexed on the verb: for subjects this is obligatory, for objects dependent on topic-status.

Topics are most often expressed purely by indexes on the verb. A primary topic NP typically occurs (clause-initially) when there are several activated participants (of the same gender and number), and thus a pronoun index would be ambiguous. The following sentence occurs in a discourse in which a house is mentioned; thus ‘floors’ are activated (definite) as part of the situation (Lyons 1999: 2-4). There are however many other things that are similarly activated (doors, windows etc.), so the full noun is used:

(1) \textit{ṭawābəq} kutāy \textit{kull-ay} NP\textit{əL-LA|}
floors all-POSS.3PL fell-L(SBJ).3PL
‘the floors all \textit{COLLAPSED},...’

The postverbal (or ‘right-dislocated’, see Lambrecht 1994: 202-204) topic construction appears to occur where the referent might well be retrievable from anaphora alone, but some potential ambiguity remains:

(2) K-\textit{Mazəd’-v} bağdad.|
IND-frighten-S(SBJ).3FS Baghdad(f.)
‘It’s \textit{FRIGHTENING} Baghdad.’

This contrasts clearly with postposed focus, which would be take the nuclear stress.

When there is both a subject and an object nominal (or independent pronoun), usually the verb position is in the middle: i.e. either SVO or OSV. (This contrasts with some eastern dialects of Neo-Aramaic, which, probably under the influence of Iranian, typically have the verb following its NP arguments, i.e. SOV, OSV). The topic argument comes before the verb and the focus typically follows, taking the nuclear stress.

The position of the focussed argument after the verb may cause some ambiguity however: when there is broad focus (i.e. the whole phrase constitutes new information), the nuclear stress similarly comes on the final component of the intonational phrase. Thus the following phrase could be understood as either having focus on the whole phrase or just on the final element, the object:

(3) k-\textit{maḥk-ux-wd} SūRAθ,|
IND-speak-1PL(SBJ)-PST Surath
[We spoke \textit{SURATH},] FOC
or We spoke \{SūRAθ\} FOC.
(constructed example)
The first interpretation might be the answer to ‘What did you do?’ or ‘What happened?’, while the second would be the answer to ‘What did you speak?’

There is an alternative strategy available to disambiguate between these two interpretations, where the (stressed) focussed element is positioned immediately before the verb:

(4)  $\text{Sūrath FOC} \text{-māhk-ux-w d.} /$

Surath IND-speak-S(SBJ).1 PL-PST

‘We spoke Sūrath.’/ ‘It was Sūrath that we spoke.’

This paper will address these and other strategies (DOM, cognate infinitive construction used for focus on the lexical content of the verb etc.) that are involved in the interaction of syntax and information structure in this dialect and consider how far they support proposed cross-linguistic tendencies in information structure expression.

References
The illocutionary basis of Information Structure
Cresti, Emanuela and Massimo Moneglia

The identification of reference units in a spoken corpus through syntactic and semantic devices which are employed in the analysis of writing is problematic (Blanche-Benveniste 1997; Miller & Weinert 1998; Abeillé 2003; Izre’el 2005). In accordance with a specific pragmatic tradition (Austin 1962; Quirk et al. 1985; Biber et al. 1999), research on spoken Romance corpora (Cresti & Moneglia 2005; Raso & Mello 2012) has led to the identification of the pragmatically defined utterance as the unit of reference for speech.

In the framework of Language into Act Theory (L-AcT, Cresti 2000; Moneglia & Raso 2014), prosody provides the means (through terminal breaks) of formally identifying the utterances within the flow of speech and segmenting it into information units (through non-terminal breaks) (Danieli et al., 2004; Moneglia et al. 2010).

Following the above criteria, LABLITA identified all the utterances of an Italian reference corpus and aligned them with their acoustic sources (WinPitch, Martin 2004). Using this large empirical dataset, the team developed the IPIC database (available online) where the Information Structure (IS) of a large sampling of this corpus is annotated (21,000 utterances, Panunzi & Gregori 2011; Panunzi & Mittmann 2014).

According to L-AcT, the Comment information unit accomplishes the illocution of the utterance and is the center of the IS. An utterance can be composed of a single Comment, which is necessary and sufficient for its performance, or a Comment together with additional, optional units which have different communication functions.

The identification of the Comment unit led to research on the actual variation of illocutionary values in spontaneous speech, producing a repertory of about 90 speech act types (Cresti 2005; Cresti forthcoming). The repertory is not a taxonomy grounded on logic criteria (Searle 1979; Sbisà & Turne 2013); it is based, rather, on pragmatic features in accordance with the usage based tradition (Kawaguchi et al., 2006; Cresti 2006).

It emerges from this that the illocutionary value accomplished by the Comment in spontaneous speech is non-assertive for at least 45% of utterances. This very general quantitative datum is of note because of its theoretical relevance to the conception of IS. In fact, it conflicts with the idea that IS corresponds to a Topic-Focus relation, meaning a proposition with a truth value (Krifka 2007; Krifka & Musan 2012). No truth value can be assigned to utterances whose Comment is, for instance, directive.

Given that the Comment accomplishes whatever illocution type, the Topic is defined as the field of application of illocutionary force, while the Topic and the Comment are related by a pragmatic aboutness function (Cresti 2012). Defined as such, the function is very far from a semantic relation between a Predicate-like Focus (or Comment) and a Subject-like Topic. More specifically, according to L-AcT the utterance doesn’t correspond to a syntactic and semantic proposition but rather to a combination of information units which are functionally conceived (Cresti 2014).

This talk will present the illocutionary repertory and some instances taken from Romance and English spontaneous corpora supporting the above theoretical framework.

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(The prosody of) topics in Egyptian Arabic
Dina El-Zarka

Based on a study of the interaction of information structure and prosody in a corpus of Egyptian Arabic (EA) naturalistic data (conversational data, narratives, descriptions and instructions), I will present a description of different types of topics (both formally and functionally) in EA and compare the prosody of topical tunes (or pitch accents) to those described for other languages, touching various controversial issues, e.g., contrastivity.

In the literature on topicality, a wide range of phenomena has been subsumed under the term topic. Starting out from a comprehensive understanding of the concept that comprises the functions of aboutness, addressation and frame-setting (Chafe 1976, Jacobs 2001), I will suggest that two different notions have to be distinguished: entity topic and thematic topic (or theme). Following Lambrecht (1994), I assume that a sentence may contain more than one topical expression, such as lexical NPs or pronominal elements. At the same time, a topic may also be implicit, coded as a verbal affix or not coded at all. The different types of topic expressions invariably refer to entity topics. To account for the frequently observed formal bipartiteness of a topic-comment sentence, however, it is useful to restrict the topic constituent to the left periphery of a sentence, which will be referred to as theme (cf. e.g., Halliday 1967). Obviously, entity topic and theme are not mutually exclusive. It will be shown that although entity topic and theme may be identical, a theme may also consist of a presupposition that goes beyond the existential presupposition of an entity. The common denominator of widely diverging constructions identified as instantiations of theme is the occurrence of a specific prosodic tune (cf. also Steedman 1991) on the form side and the interpretation in terms of aboutness, addressation or frame-setting on the function side.

The comparison between the prosody of EA topics and topics in other languages (most notably the prosodically well-researched West-Germanic languages) yields the following results:

- The major difference between EA and many other languages concerns the low frequency of deaccentuation.
- Thus, the low linking contour (deaccented or L*) in the European languages, especially those of the West-Germanic family, corresponds to a leading-linking contour (i.e. H-, LH) in EA, sometimes realized in a compressed pitch range.
- Consequently, in EA an accent on a topical item is neither enough to give rise to the implicature of contrastiveness, nor does it necessarily indicate topic shift or topic activation.
- To mark topic shifts (whether in sentence topic or discourse topic) or to emphasize aboutness, EA thus resorts to phonetically more prominent accents of the leading (high rise) or the closing type (rise-fall), with the leading type implicating aboutness and the closing type newness or contrastiveness.
- EA is an “H* language” (Hedberg & Sosa 2008), contrary to Spanish or Italian that frequently use rises with the low tone associated with the stressed syllable. Consequently, L*H rises are less frequent in EA.
References
Floating agreement and information structure in Sanzhi Dargwa and Lak

Diana Forker

The current discussion about person agreement in relation to information structure predominantly centers on optional agreement and topicality: in languages with optional agreement the agreement markers are more likely to occur with topical controllers (e.g. Nenets (Dalrymple & Nikolaeva 2011: 127-132) and Northern Ostyak (Nikolaeva 1999)).

This paper aims at drawing attention to a hitherto neglected side of the relationship between person agreement and information structure, the position of agreement markers and their function in focus constructions. This will be done by investigating floating agreement in Sanzhi Dargwa and Lak, two Nakh-Daghestanian languages spoken in the northern part of the Caucasus. Floating agreement markers are person enclitics that are normally found on the verb (1) but can under certain circumstances float off and attach to other constituents such as nouns, pronouns, adverbs, etc. (2). Floating agreement has a marked pragmatic effect that informally can be described as emphasizing or highlighting the constituent that serves as the host. Floating agreement markers belong to a close set of particles/enclitics that also includes the auxiliary ‘be’, tense markers, interrogative enclitics, etc. All these markers have a narrow grammatical function and at the same time serve as discourse markers.

Within a functionally-oriented framework (cf. Lambrecht 2001), I will provide an analysis of the pragmatic function of the floating agreement markers in Sanzhi Dargwa and Lak and compare them to similar constructions in other Dargwa languages (e.g. Kalinina & Sumbatova 2007, Sumbatova 2013) and Udi (Harris 2002). I will discuss the suggested analysis of floating agreement in Lak as synchronic in situ clefts (Kazenin 1998, 2002) and show that a similar account for the Sanzhi data must be rejected. I will further examine whether a diachronic left account similar to what has been proposed for Udi (Harris 2001) is tenable for both Lak and Sanzhi. The data discussed in this talk have been gathered during fieldwork in Daghestan and originate from natural texts, enriched by elicitation whenever necessary.

Examples from Sanzhi Dargwa, collected during fieldwork

(1) du-l hana t’alaˁh-ne ic-ul=da
   1sg-ERG now dishes-PL wash.IPV-ICVB=1
   ‘Now I am washing the dishes.’

(2) du-l hana t’alaˁh-ne=da ic-an, c’il ...
   1sg-ERG now dishes-PL=1 wash.IPV-OBLG then
   ‘Now I am washing THE DISHES, ...’ (e.g. later I will clean the windows).
References
Movima, a linguistic isolate of lowland Bolivia, has predicate-initial syntax (VOS). Consider the canonical transitive clause in (1), where the verb comes first and the subject (bold; in the case of a DIRECT-marked verb, the patient) is expressed in clause-final position.

So-called verb-initial languages are often claimed to have a preverbal slot for focused or topicalized noun phrases (see e.g. Aissen 1992 on Mayan). Similarly, it seems that in Movima, the subject argument can “move” from its clause-final position to the position before the predicate. Compare the canonical construction (1) with the pragmatically marked construction (2) (where the pronoun appears in its “strong” form), which expresses argument focus.

However, when dependent clauses are taken into account, a different analysis seems to be more adequate. In dependent clauses, the predicate is nominalized, as shown in (3) for the canonical case. Interestingly, in the case of the “marked” construction, it is the pronoun that is nominalized, while the verb remains unmodified (4).

Thus, in the dependent clause, the pronoun is formally identified as the predicate. Consequently, it might be more adequate to analyze the pronoun as the predicate also in the main clause (2), rather than as occupying a slot preceding the predicate. Under this analysis, the “marked” construction would be a cleft, with the pronoun as the main predicate and the verb as a headless relative.

Indeed, there is also evidence that the verb in the marked construction is a headless relative. First, its subject cannot occur in its canonical, clause-final position: it is gapped. Second, when the focalized argument is the non-subject of a transitive clause, a valency-decreasing construction is required, shown in (5). Both these phenomena, gapping and valency decrease, only occur in a specific set of constructions, which share the property that a lexical predicate is preceded by a reference-establishing unit, such as a free pronoun (‘It was him [whom] she saw’, (2)), a determiner (‘the [one whom] she saw’), or a full NP with a relativizing particle (‘the man whom she saw’). In all these constructions, the verb has a relativizing (restrictive) function, narrowing down the class of potential referents.

Thus, Movima syntax is governed by information structure: the predicate represents the focussed constituent, and whatever is to be in focus will be encoded as the predicate; in the case of argument focus, this results in a cleft.

The paper will present the crucial properties of Movima grammar that corroborate the present analysis: the different types of relative clauses, voice alternations, and the syntactic flexibility of lexical classes. Based on an annotated corpus of spontaneous oral discourse, it will furthermore provide contextual data illustrating the pragmatic functions of the different construction types. (457 words)

References:
Examples:

(1) \( vel-na=sne \quad kus \)
    watch-DR=3F.AB OBV.3M.AB
    ‘She watches him.’

(2) \( usko \quad vel-na=sne \)
    PRO.3M.AB watch-DR=3F.AB
    ‘She watches him.’

(3) \( n-as \quad vel-na-wa=sne \quad kus \)
    OBL-ART.N watch-DR-NMLZ=3F.AB OBV.3M.AB
    ‘when she watches him (lit.: “in her watching him”’)

(4) \( n-as \quad usko-niwa \quad vel-na=sne \)
    OBL-ART.N PRO.M.AB-VBLZ:NMLZ watch-DR=3F.AB
    ‘when it’s him she watches’

(5) \( isne \quad kaw \quad vel-na \)
    PRO.F.AB VALDECR watch-DR
    ‘She is the one who watches (him).’

Abbreviations:
3 = third person; AB = absential; ART = article; DR = direct; F = feminine; M = masculine; OBL = oblique; OBV = obviative; PRO = free pronoun; NMLZ = nominalizer; VALDECR = valency decreaser; VBLZ = verbalizer.
The canonical view of clause (or sentence) requires that it include predication (e.g., Biber et al. 1999: §3.2). Utterances that do not fit into this view because they lack a subject, when not excluded from the syntactic analysis altogether (cf., e.g., Carter and McCarthy 2006: 490), are usually regarded as if a virtual subject is represented in the clause as a zero component or as if an allegedly missing subject has gone through a process of ellipsis. This perception goes back at least to Apollonius Dyscolus (Lallot 1997: 373; see, among many others, Benayoun 2003; Spenader and Hendriks 2005; Winkler 2006). However, this type of structure is so frequent among the world’s languages (Givón 1983) that one wonders whether clauses without subjects are indeed to be viewed as elliptical. The study of spoken languages intensifies this perplexity to a point where some basic notions of grammar may be questioned. Adopting a framework of an integrative approach to the structure of spoken language that includes prosody, information structure and syntax, I try to look at clause structure rather differently. Whereas the originally-Aristotelian concept that a subject is a necessary component in language, and specifically in a clause, a conception that arose from ontological and logical needs, I do not see predication as a necessary structural element in a clause, suggesting that the only necessary and sufficient component comprising a clause is a predicate. The clause will thus be defined as a unit consisting minimally of a predicate. A predicate can be either nuclear or extended; in other words, it can consist of either a single element (phrase, word or part of a word) or be seen as a domain. The predicate (or the predicate domain) will be viewed as the component that carries the informational load of the clause within the discourse context, which by default will be a newly introduced element. Also, and no less significantly, the predicate (or the predicate domain) is the component that carries the modality of the clause (cf. Lefeuvre 1999: ch.1), where modality is viewed in a broad perspective.

Two main classes of clauses have been identified: (1) Unipartite, consisting of only a (nuclear or extended) predicate; (2) Bipartite, where a clause consists – in its minimal manifestation – of a predicate and a subject (Izre’el 2012).

In my presentation, I will look at unipartite clauses, being the minimal disposition of a clause, i.e., one that consists of only a predicate domain, where a subject does not form part of the clause. A broad classification of unipartite clauses in spoken Israeli Hebrew will also be presented, based on anchoring points within a discourse context (intra- or extra-linguistic) and types of anchors.

The research has been based on data taken from The Corpus of Spoken Israeli Hebrew (CoSIH), a corpus of spontaneous Hebrew conversations, segmented into prosodic modules (aka intonation units), transcribed in its bulk in Hebrew orthography and annotated for (functionally perceived) final boundary tones. See the attached textual samples.

References:


Syntax and Information Structure: The case for Unipartite clauses
A View from Spoken Israeli Hebrew

Textual samples

In the following two samples, quite typical for Hebrew casual talk, none of the units conforms to the common view of *clause* (or *sentence*) as a unit consisting of both subject and predicate. Transcription is broad phonetic with some morphophonological input. Segmentation is into *information modules* (IMs; aka *intonation units*). Transcription notation: each IM is transcribed in a separate line; final tones: || major, | minor, / appeal (cf. Izre’el 2002, following in essence Du Bois et al. 1992).

(1) Planning a weekend in a hotel (OCD2_sp2_057-061; sp1_026-030)

| sp2: | mɔʁuʃ || Morush          |
|-----|------|-----------------|
| sp1: | ma mɔtɛk || ‘What, sweetie?’ |
| sp2: | aæbaa jamim |
|     | four days |
| fva mɛt fɛkɛl le=vuʃ || ‘(For) four days –’ |
|    | seven hundreds shekel tɔ=couple |
| sp1: | bli kɛʃɛf || ‘without money’ |
| sp2: | nɔʃɔn |
|     | right |
| sp1: | eʃɔ / |
|     | where |
| sp2: | be=holideʃ in hæ=ɔdaʃ || ‘In the new Holiday Inn.’ |
| sp1: | daj || ‘Wow!’ |

(2) Speaking of Mongolian horses (OCh_sp2_091; sp1_086-088)

<table>
<thead>
<tr>
<th>sp2:</th>
<th>sus mɔmaf /</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>horse real</td>
</tr>
<tr>
<td>sp1:</td>
<td>sus sus</td>
</tr>
<tr>
<td></td>
<td>horse horse</td>
</tr>
<tr>
<td>wɔk jɔtɔr namuχ</td>
<td></td>
</tr>
<tr>
<td></td>
<td>only more short</td>
</tr>
<tr>
<td></td>
<td>‘but shorter.’</td>
</tr>
<tr>
<td></td>
<td>raglaim mɛkuʃaʃɔr kαrle</td>
</tr>
</tbody>
</table>

References:


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1 Personal names (in this case, a nickname) have been changed or eliminated in *CoSIH* for privacy.
2 The basic monitary unit of Israel.
Recent research in information structure (IS) has cast doubt on the universality of information structure categories (Matić & Wedgwood 2013). In this paper, I am going to develop this idea further by analysing possible partitions of the IS space and exemplify this with a corpus-based analysis of the highly idiosyncratic IS system in Tundra Yukaghir, a north-eastern Siberian isolate.

The set of standard assumptions in the IS research can be subsumed as follows: (a) Common Ground delivers partially defined propositions that constitute the background; (b) the job of grammars is to signal the locus of saturation of these partially defined propositions, i.e. the ‘focus’; (c) grammars differentiate between the following types of saturation – narrow, broad and sentence focus (Lambrecht 1994 and many others). There is no doubt that this kind of system works well in the description of some European languages. However, many languages seem not to be sensitive to focus size and the degree of givenness of the background. In order to try and accommodate at least some (though certainly not all) variation in the domain of IS categories across languages, I will propose an additional dimension of IS, based on possible expectations generated in discourse. If the development of discourse is conceived as a sequence of questions under discussion (QUD, Roberts 2012), then at least the following types of expectations related to QUDs can be defined: (a) eventualities entailed by QUD and therefore expected (EE); (b) eventualities that are plausible given the current QUD and therefore possible (PP), and (c) eventualities underspecified as to the current QUD (U). These three categories form a Horn scale <EE, PP, U>, such that the use of the type on the right implicates that the meaning of the type(s) on the left does not apply.

I shall argue that the so-called Tundra Yukaghir focus system encodes the difference between EE, PP and U rather than focus size and background specification. In particular, the S- and O-focus sentences denote EE eventualities, neutral sentences with the particle ma(r)=PP eventualities, while those sentences that contain neither ‘focus’ marking nor particles convey U-type events. These sentence types directly encode EE, PP and U as *procedural meanings* in the sense of Relevance Theory: they provide the hearer with instructions not about the content of the partition of the context set that is to be updated, but rather about the way inferences are to be drawn given the current QUD. Using the EE form amounts to the instruction ‘interpret as an answer to the preceding QUD’, whereas U form implicates dissociation from the QUD. PP confirms expectations or presents an eventuality as corresponding to expectations given the current QUD. I will show that these general types of instructions can have multifarious interpretive effects.

Tundra Yukaghir thus instantiates an IS system which has little in common with the standard European type, despite appearances. It is conceivable that other languages are sensitive to yet other restrictions and divisions. I conclude with the suggestion that a realistic typology of IS should devote its energy to identifying differences of this kind rather than looking for structural identity where there is none. Importantly, this kind of cross-linguistic variation cannot be detected by simply applying the standard test battery for information structure, but solely by thorough investigation of natural discourse.
References

Marianne Mithun

It is sometimes assumed that prosody (pitch, volume, timing, voice quality) directly reflects syntactic structure. Analyses of spontaneous speech in natural settings show, however, that though grammatical and prosodic structure can coincide and act in concert, each constitutes a system of its own, with characteristics and functions not shared by the other. Morphological and syntactic constructions are generally conventionalized and categorical, conveying a wide variety of semantic distinctions. Prosodic structures can be conventionalized, but they are less categorical, operating on continua: utterances may exhibit wide or narrow pitch ranges, short or long pauses, etc. The information they convey tends to involve discourse status, conventionalization, and interactional goals more heavily: topic shifts, reiteration of continuing topics (antitopics), foci of various types, differences among given, accessible, and new information, organization of information into larger discourse units, and more.

Relations between grammatical and prosodic packaging of information are examined here in Central Pomo, a language of the Pomoan family indigenous to Northern California. Data are drawn from a corpus of around 75 hours of unscripted speech: conversation and monologue of various genres. First it is shown that while prosodic phrases (intonation units) generally reflect cognitive entities (one new piece of information at a time), prosodic sentences generally reflect semantic units (events). As in many other languages, Central Pomo topic shift, antitopic, and focus constructions show distinctive prosodic patterns.

Central Pomo is of special interest because of a set of clause combining constructions marked by verbal suffixes and enclitics. The markers distinguish sequences of clauses packaged together as a single event/state (SAME) from those packaged as separate (DIFFERENT) events/states. Within these two sets, realis and realis situations are distinguished, and within realis, simultaneous and consecutive situations. While sequences of clauses linked grammatically with SAME markers are typically closely integrated prosodically, and those linked with DIFFERENT markers are typically expressed in separate intonation units often separated by pauses, the prosodic structure makes finer distinctions than the grammatical structure, showing degrees of integration reflecting the discourse status and routinization of the ideas conveyed.
Discourse prominence and differential subject marking in Wan
Tatiana Nikitina

Cross-linguistically, differential argument marking and alignment splits are commonly conditioned by the arguments’ discourse prominence, or topic-worthiness, defined in terms of factors such as animacy, definiteness, and information-structure properties (Silverstein 1976, Aissen 2003, Dalrymple & Nikolaeva 2011, among others). Compared to systems of differential object marking, differential subject marking is typologically less common, more heterogeneous, and generally less understood (de Hoop & de Swart 2008). This paper describes a system of differential subject marking attested in Wan (Southeastern Mande), which has no known parallels in other Mande languages, and appears to be a relatively recent innovation.

Like other Mande languages, Wan has a rigid SOVX word order. Syntactic positions are in strict correspondence with grammatical relations, and no argument pro-drop is allowed. In spontaneous discourse, however, the conventional SOV(X) structure is surprisingly infrequent, and it is only attested in clauses where subjects exceed objects in discourse prominence (more precisely, in definiteness and pronominality). Typical examples of SOV(X) involve combinations of pronominal subjects with NP objects (1a), and combinations of definite NP subjects with indefinite NP objects (1b).

Three different strategies are employed to avoid situations where the object is more, or equally, discourse-prominent than the subject. First, subjects with low discourse-prominence are left-dislocated, and represented within the SOV(X) core of the clause by an anaphoric pronoun (cf. the dislocated indefinite subject in 2). Second, anaphoric reference can be marked non-segmentally, by a lengthening of the vowel preceding the verb (cf. the lengthening on the subject in 3). The use of lengthening helps avoid overt pronominal objects in the context of prominence violations within a SOV(X) clause, as they result in a S::V(X) structure.

The third strategy employs a special marker that introduces subjects with relatively low discourse-prominence (4). The same marker can also appear with canonical combinations of a highly prominent subject and a less prominent object, but in that case, it serves to introduce contrastive focus (5). The subject-marking, information-structure neutral function (as in 4) does not imply any focus, and it is only attested in transitive constructions. It is in this sense parallel to the use of ergative markers in languages with pragmatically-conditioned ergativity, where “optional” subject markers also tend to derive from information-structure markers (LaPolla 1995, DeLancey 2011, Jenny & Hnin Tun 2013). Both systems provide additional marking to cases where expectations regarding the subject’s relative discourse-prominence are reversed.

In Wan, as in some other languages with pragmatically-conditioned subject marking, restrictions on argument prominence are only visible in spontaneous discourse, and do not show up in elicited data. The subject marker plays little role in carefully pre-planned speech, where non-canonical mappings of information-structure properties onto grammatical relations tend to be avoided.

I present a corpus-based study of factors involved in the choice between the three strategies for avoiding prominence violations, and discuss implications of my data for traditional, elicitation-based approaches to language description (which run the risk of ignoring important discourse phenomena that are pervasive in naturally occurring data).
References
Examples:

(1a) \( \text{1}\text{PL.INCL.} \text{lizard treat.as.totem-HAB} \)
    ‘We treat lizards as a totem.’
    (pronominal subject & indefinite object)

(1b) \( \text{1}\text{SG:ALN.} \text{field DEF child make:PAST} \)
    ‘My field produced crop.’
    (definite subject & indefinite object)

(2) Left-dislocation of an indefinite subject:
    \( \text{children 3}\text{PL.} \text{lizard eat-HAB} \)
    ‘Children [also] eat lizards.’
    (indefinite subject & indefinite object)

(3) Lengthening as a means of avoiding overt pronominal objects:
    \( \text{man+3SG give.birth:PAST NEG} \)
    ‘He was not born from a human.’
    (indefinite subject & definite object)

(4) Subject marker (reversed prominence relations):
    \( \text{that all SUBJ 1SG annoy-HAB} \)
    ‘All that annoys me.’
    (definite subject & pronominal object)

(5) Focus marker (canonical prominence relations):
    \( \text{woman FOC+3SG take-HAB} \)
    ‘It is a woman who sings it.’ (not a man)
    (contrastive focus on subject)
Multiple Focus and Sluicing in Spoken Georgian and Megrelian

Zakharia Pourtskhvanidze, Maia Lomia, Rusudan Gersamia

This paper deals with so far not studied aspects of the topic—sluicing and corresponded information structuring effects—in two south Kartvelian languages: Georgian and Megrelian. The recent developments in the corpus linguistics regarding Kartvelian languages allow a corpus-based investigation of above topic.¹

Sluicing is a type of ellipsis and a characteristic feature of the spoken language. Sluicing (Ross.²) is considered as advantageous context for an adequate explanation of syntactic constructions and pragmatic implicatures.³ The predominant property of sluicing is the stranded remnants of the interrogative phrase in the form of the wh-word clause-final position. (1) I was afraid of something that day, but I didn't know of what.

In most of the cases they are of the form:

- Matrix sentence + subordinate clause: (negated) verbum (sentiendi) + wh-word [~ omission].

The example (G1) correspond with (1). (For full constructions see Appendix 1.)

(G¹1) [... ] magram ver gavarčie ra. but NEG distinguish1SG what [... ] but I could not see what.

The omitted phrase (Geo) [sagnebi (eĉirat (xelši))] / (Megr) [(mugdarenepi (ukebudes (xes))) “kind of things (they kept (in hand))” complete the syntactic construction at different clause positions depending on the language:

(G1) [... ] magram ver gavarčie ra [sagnebi (eĉirat (xelši))]. [... ] but I could not see what [kind of things (they kept (in hand))].

(M³¹) [... ] mara mu-[mugdarenepi (ukebudes (xes))]-ni va-gmarčiebu. [...] but what [kind of things (they kept (in hand))], I could not see.

We assign the omission of the type (M1), in which the finite construction does not precede rather follows the wh-word, to pseudo-sluicing.

- Matrix sentence + subordinate clause: wh-word [~ omission] + (negated) verbum (sentiendi).

Georgian uses both ways in different frequency, while Megrelian knows only pseudo-sluicing (Table1.).

<table>
<thead>
<tr>
<th></th>
<th>Georgian</th>
<th>Megrelian</th>
</tr>
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<tbody>
<tr>
<td>Sluicing</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Pseudo-Sluicing</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 1.

We observe different stratification of the overlapped focus scopes by wh- words and negation particles in both languages. In Georgian is the negation particle more highlighted as the sluiced wh- word, whereas in Megrelian we verify a situation vice versa. Information structure effects by sluicing interact with basic constituent order in the subordinate clause. It is likely that the different sluicing behaviour and depending realization of focus strategies in (G3) and (M3) corresponds to the different degree of word order flexibility in the treated languages.
(G3) [...] daagviana da mere rogor\textsubscript{FOCUS} (German) er hat sich verspätet und wie!
He was late and than how\textsubscript{FOCUS}

(M3) [...] degviano do ukuli mučo\textsubscript{FOCUS} degviano. late cf. *degviano do ukuli mučo.
He was late and than how\textsubscript{FOCUS} he was!

The fact, that “*degviano do ukuli mučo” is fully ungrammatical, suggests that Megrelian tends to order with obligatory final verb position, while in Georgian this is optional. That has some consequential effects in regard to information structuring discussed in the given paper.

1 http://clarino.uib.no/gnc/ (Georgian National Corpus, SSGG – Spoken Georgian Language Corpus, Size (tokens) 179 429).
2 Ross:1969.
4 G–Georgian.
5 M–Megrelian.
Appendix 1.

(G1) xelši ertairipormis sagnebi ečirat, magram ver gavarčie ra.
hand.in identical formGEN itemPL hold3PL, but NEG distinguish1SG wh

Literally: In hand uniform things they kept, but I could not see what.

(M1) xes arnter formas mudgarenepi uşebudes, mara mu-ni va-gmarčiebu.
hand.in identical formGEN itemPL hold3PL, but wh- whether NEG-distinguish1SG

Literally: In hand uniform things they kept, but what whether I could not see.
They kept uniform things in hand, but I could not see what.

(G2) vusmendi. rağacas mnišvenlovans rom ambobda, vxxdebodi. magarm – ras, ver vigebdì.

vusmendi rağacas mnišvenlovans rom ambobda, vxxdebodi. Listen1SG somethingDAT importantDAT that say3SG guess1SG
magarm – ras, ver vigebdì.
but – what, NEG understand1SG

Literally: I listened to her. Something important that she said, I guessed, but – what, I did not understand.

(M2) určkiledi. mudgareni sarko rduni tis ičiebudu-ni, bxvadudi. mara musu-ni, va-vgebulendi.

určkiledi. mudgare-ni sarko rdun-ni tis ičiebudu-ni, bxvadudi. mara musu-ni, va-vgebulendi.
guess1SG but, what-that NEG-understand1SG.

Literally: I listened to her. That something important that was, this she that said, I guessed, but what whether, I did not understand.
The something I listened to, I guessed that she said something important, but I did not understand what.

(G3) satamašod gakceul švils dedam miažaxa – ar daaavianoo. daavgiana da mere rogor!
satamašod gakceul švils dedam miažaxa – ar daaavianoo.
to play racing sonDAT motherERG call after3SG NEG be late2SG.QUOT
daavgiana da and mere than rogor!
late3SG how!

Literally: To the son, who race to play, the mother called after – do not be late! He was late and how!

(M3) olașapușa iɾtunî ti șkuas didak miağažaxu – ve-degyvianu-ava. degviano do ukuli mučo degviano.
olașapușa iɾtu-ni ti șkuas didak miağažaxu – ve-degyvianu-ava.
to play race-who do this sonDAT motherERG call after3SG - NEG-belate-QUOT
degviano ukuli mučo degviano.
late3SG and than how late3SG.

Literally: To play who race this son the mother called after – do not be late! He was late and than how late he was!
The mother called after to the son, who was racing to play – do not be late! He was late. And how!
A universal analysis procedure for information structure, QUDs and discourse structure

Arndt Riester, University of Stuttgart

Matić & Wedgwood (2013) question the possibility of universal categories of information structure. Despite this, I will present a meaning-based, language-independent analysis procedure for basic information-structural notions like focus, background, focus domain and (aboutness/contrastive) topic that makes use of Questions under Discussion (Roberts, 1996). The goal of the procedure is to turn a text or transcript of spoken discourse into a discourse tree (Figure 1) whose terminal nodes consist of (implicit, reconstructed) questions and whose terminal nodes represent the assertions of the text, in linear order. The benefit of such a tree is that it mirrors both the discourse structure and the information structure of a text. We can identify the focus of each assertion as the answer to its immediately dominating QUD. The crucial question is, of course, how to determine the QUDs. If we only consider an isolated assertion – say A2 – then there are at least as many potential QUDs as there are syntactic constituents. However, if we take more context into account, the search space for the right question is drastically reduced.

A first step is to identify partial answers to the same QUD. For instance, A1' and A1'' have been identified as parallel/partial answers to QUD1. The latter can now be clearly formulated, since it must comprise the “lowest common denominator” between A1’ and A1’’, i.e. the material they have in common. This material also represents the background of both assertions (sometimes including an aboutness topic), while the wh-element of QUD1 corresponds to the non-overlapping parts of the assertions, i.e. their respective foci. The combination of a focus and a background is called a focus domain (Büring 2008). Note that parallel assertions in a text need not be immediately adjacent but can also be separated by intervening material. For instance, A0' and A0'' both answer the main question QUD0, but are separated by material which does not (or at least not directly) answer QUD0. This brings us to the second constraint: as long as we do not expect the writer or speaker to have produced an incoherent discourse (by suddenly switching to a completely unrelated topic), we can safely assume that the intervening material, e.g. QUD1 and its answers, relate to what was immediately said before. This means that any sub-QUD to QUD0' must contain some given material (i.e. relate to and ask about what was just said in A0'). In my talk, I will show, using real corpus data (essays, narratives, spoken interviews, radio news) from English, German, French and Balinese, that with these two constraints we are already able to structure a large proportion of the discourse. Two further phenomena I will talk about concern the identification of contrastive topics (Büring 2003) and not-at-issue content (Simons et al. 2010), i.e. appositives, parentheticals, evidentials etc. A constructed discourse that corresponds to the abstract tree representation in Figure 1 is given in (1) (tree structure represented by means of indentations and the > symbol).
(1)

QUD₀: {What did Peter do on Saturday?}
> A₀: [On Saturday, [Peter, topic] my cousin, not-at-issue [decided to go shopping], focus] focus domain-
> QUD₁: {What did he buy?}
> > A₁: [[He, topic] bought [a fishing rod], focus] focus domain-
> > A₁’: Moreover, [[he, topic] got [some 50 meters of boulter], focus] focus domain-
> QUD₂: {Why did he do this?}
> > A₂: [[He, topic] wanted to surprise his friends], focus with this], focus domain-
> > > QUD₃: {Which friends would be surprised and why?}
> > > A₃: [[Mary, contrastive topic] had been talking about going fishing for years], focus] focus domain
> > > QUD₄: {Why would Mary be surprised?}
> > > A₄: And [[Harry, contrastive topic] is great at cooking trouts], focus] focus domain-
> A₀’’: Afterwards, [[Peter, topic] went to the hairdresser], focus] focus domain-

References

Agents in focus: “Optional” ergativity in Jaminjung and information structure

Eva Schultze-Berndt

The influence of information structure on differential agent marking has received a fair amount of attention in recent years. Notions that have been invoked to account for the presence of ergative marking include “focus” and “new information” (Fauconnier & Verstraete 2014; Hyslop 2010: 13-17; Malchukov 2008; Suter 2010; e.g. Tournadre 1991), “contrast” (Chelliah 2009; Jacques 2010; Tournadre 1991), “topic/actor switch” (Bond et al. 2013; Lidz 2011), and “prominence” or “(contrastive) emphasis” (LaPolla & Huang 2008; Meakins 2009: 78; 2011: 228–236; Tournadre 1991, 1995). The notion of “prominence” and a similar notion of “(argument) strength” is given an even wider interpretation – variably encompassing a high rank on the animacy hierarchy and discourse topicality as well as perfectivity of the clause and volitionality of the agent referent – in some recent works addressing differential argument marking from an optimality-theoretic perspective (Aissen 1999; De Hoop & Malchukov 2007; Legendre et al. 1993: 684–688). As De Hoop and de Swart (2009: 14) point out, employing such a broad notion of prominence leads to the somewhat unsatisfactory conclusion that some languages appear to have a preference for agents high in prominence but others for agents low in prominence to be case-marked. The use of contradictory or overly general notions of information structure is of course partly related to the difficulty of identifying information structure categories in spoken corpora of lesser studied languages.

This paper reports on a discourse study of the factors influencing overt case marking of agents in Jaminjung, a Western Mirndi language of northern Australia, based on prosodic and positional criteria for the identification of topical constituents and elements in broad and narrow focus (Simard 2010, 2014). This reveals a strong tendency for focal agents to be case-marked, which intriguingly also manifests itself in the existence of an infrequent second, “focal” ergative marker (taking the form of the Ablative case) which mainly occurs in the context of argument focus.

However, information structure interacts with additional factors, corresponding to those relevant for consistently split ergative systems (cf. McGregor 2010: 1616): speech act participant status and animacy of the agent, tense/aspect, and the degree of effectiveness of the event on an undergoer. It will be argued (building on McGregor 1992) that at a more general level, all of these factors conspire to ensure that less expected agents are marked whereas – by the principle of economy – expected agents can remain unmarked. For example, the expectation for agents to be topics will result in a near-categorical agent-marking in focus position. However, the expectation for speech act participants to be agents makes ergative-marking redundant even for focused agents, while the expectation for inanimates to be non-agents result in categorical ergative marking of inanimates. Economy can also override focal agent marking in the case of an event that is low in effectiveness, and in parenthetical speech framing constructions. The findings demonstrate the usefulness of more fine-grained information structure categories, as opposed to a generalised notion of “argument strength”, in research on differential agent marking.
References:
Suter, Edgar. 2010. The Optional Ergative in Kâte. In John Bowden, Nikolaus P. Himmelmann & Malcolm Ross (eds) *A journey through Austronesian and


Differential Time-Adverbial Marking in Lithuanian
Ilja Seržant

Durational time adverbials refer to the time span within which (minimally) the event is claimed to take place. These adverbials are typically marked by the accusative case, which is the unmarked option in terms of both frequency and semantics as they do not contribute additional semantic effects (inter alia, Roduner 2005):

(1) Latvijoje treči-us met-us didėja gimstamumas
   Latvia.LOC three-ACC.PL year-ACC.PL increase.PRS.3 birth-rate.NOM.SG
   ‘The birth rate is increasing in Latvia for the third year.’

However, instead of the default accusative, the nominative case can be used for nearly the same meaning. Thus, (1) can be modified as in (2) with superficially no difference in meaning:

(2) Latvijoje tre-ji met-ai didėja gimstamumas
   Latvia.LOC three-NOM.PL year-NOM.PL increase.PST.3 birth-rate.NOM.SG
   ‘The birth rate is increasing in Latvia for the third year.’ [Constructed example]

There is no change in the syntactic structure of the clause from (1) to (2). Equally, the syntactic status of the time phrase does not change, it remains an adverbial.

I claim that there is some additional meaning that the time adverbial and its host clause receives with the nominative marking, namely, *emphasis*. The idea that emphasis may be part of grammar is controversial. Nevertheless, there is a series of recent studies arguing that *emphasis* and its more restricted correlate *contrast*, may be coded by grammar (inter alia, Bayer 2001; Frey 2010; Cruschina 2012; Bayer & Dasgupta 2014).

I claim that the nominative marking signals that the speaker assigns a particular significance to the time value against the background of other, potentially available alternative values. The event is construed as still ongoing at the reference point. The host proposition often stands out in the discourse chunk, not being part in a chain of events of an on-going story. Instead, it tends to have a concluding or introductory flavor, introducing the scene as a whole. This is because the time adverbials typically do not constitute a focus constituent on their own, being part of a larger focus and information unit (mostly predicate focus) in which case the value and the emphasis on this value cannot be interpreted without the other information contained in the VP. In contrast, the accusative marking as in (2) is the default option, not biased to emphasis.

The notion of *emphasis* is notoriously somewhat vague, and I attempt at operationalizing it on the basis of five criteria that can unambiguously be determined in every particular utterance to corroborate my claim: *tense shift* (with respect to the preceding and/or following sentence), *subject/topic shift*, *global time reference* (the time adverbial refers to the time span larger than the reference time of the event coded by its host clause), *preverbal position* (atypical for adverbials in Lithuanian), *presence/absence of intensifying particles* (such as the temporal focus particle ‘already’).

Since Lithuanian does not have a tagged corpus, I have collected around 180 randomized utterances with 90 nominatives and 90 accusatives from a google search.³ The

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¹ All examples are from Lithuanian if not otherwise stated.
statistical counts along the five criteria for both accusatives and nominatives reveal my claim to be correct.

References
Cruschina, Silvio 2012: Discourse-Related Features and Functional Projections. New York: OUP.
Frey, Werner 2010: Ā-Movement and conventional implicatures: About the grammatical encoding of emphasis in German, Lingua 120, 1416-1435.

3 I have selected the first 93 relevant examples with the nominative and the first 93 hits with the accusative marking to ensure that the collection is not biased. Irrelevant examples in which the nominative time phrase was a regular subject (e.g. with praetiti ‘to pass’), exclamations, etc. were not integrated. Doublets were excluded.
On being first
Candide Simard

In a typological perspective, first positions in sentences have been associated with information flow (Firbas 1964). Corpus research in the world languages has yielded two major, and seemingly opposing, ordering patterns: 1) a ‘given-before-new’ ordering (Gundel 1988), in which predictable information from previous discourse is placed in first position, ensuring high accessibility for speaker and listener to previously mentioned elements, and less accessible information is found towards the end of the sentence, cued by prosodic accents or morphosyntactic markers, etc.; 2) a ‘more-newsworthy-first’ ordering (Mithun 1987), where more important information for the developing discourse is placed in first position (i.e. new topics, ‘fronting’ of focalized elements, etc.); this importance is usually to signal that the information in question should be brought to the forefront of the hearer’s attention.

This paper will contribute to this discussion by reconsidering the very notion of ‘first position’ in two Australian languages, arguing, with others (Baker and Mushin 2008), that it is not always clear what it corresponds to, mostly depending whether prosodic criteria are taken into account. I propose a more fine-grained analysis, based on the usefulness of intonation units (IUs) as a basic unit of prosodic analysis. IUs serve information processing needs, a ‘chunk’ or a unit of conceptualization the speaker presents to the hearer, delimited by melodic and boundary phenomena (Chafe 1976). I will consider whether the first constituent is part of the same IU as the rest of the clause, and also examine the prosodic characteristics of those constituents that are integrated in a single IU, both in phrasing and prominence.

I will report on instrumental studies of the acoustic correlates of Noun Phrases that function as topics (including the subtypes Framesetting, Aboutness and Contrastive) or focussed arguments in two unrelated and typologically different languages in contact: Jaminjing/Ngaluwurru (W. Mindi, Non-Pama-Nyungan) and Ngarinyman/Bilinarra (Ngumpin, Pama-Nyungan). While Australian languages are said to be non-configurational, it is widely accepted that their word order is sensitive to information structure (see overview in Simpson and Mushin 2008). The study is based on natural data, including conversations and narratives, and on elicited data collected with specially designed stimuli inspired by the tasks of the Questionnaire on Information Structure (Skopeteas et al. 2006).

In both languages, NPs functioning as Framesetting topics, which set a spatial, temporal, or individual framework within which the main predication holds (Chafe 1976), can form an IU of their own, not unexpectedly (Jacobs 2001, Krifka & Musan 2012). ‘New’ discourse topics can also make their own IUs, with contours that share characteristics of thetic sentences. Both constructions are referred to as ‘detached’ NPs - it is not appropriate to refer to dislocation as Jaminjing and Ngarinyman do not have coreferential pronouns or any resumptive element.

Aboutness topics, the referent about which the proposition is about (Lambrecht 1994), however, do not make an IU of their own. Nominals are commonly elided in Jaminjing and in Ngarinyman, as in many other Australian languages, hence IUs often consists of complex verbs only. As far as it is possible to posit a default pattern, Aboutness topics precede Comments, which contains the focal constituent. Prosodic prominence falls on the first syllable of the Comment, with pitch reset and falling tone (Simard 2010), with little pitch movement on the initial Aboutness topic. This is quite easily observable in IUs made up of an NP followed by a complex verb and its arguments. But NPs as focused arguments can also occupy this initial position, appearing before the verb. A comparison of the prosodic correlates of NPs that occur in the same initial position in the utterance, but serving different functions - Aboutness topics and Argument focus - reveal that focal NPs receive pitch prominence at the left edge, while the measurements at the right edge indicate greater final lengthening in topical NPs, suggesting that they have phrasal status.

Contrastive topics have a salient pitch movement at the left edge, as evidenced by their higher pitch, wider excursion, and greater intensity. These patterns are close to those of focal constituents and make sense if contrastive topics are conceived as ‘topics in focus’ (Molmár 2006), a characterisation which suggests that they could be marked prosodically in a similar – but not necessarily identical – way as focus.
This careful prosodic examination of prominence and phrasing phenomena of NPs in ‘first position’ in Jaminjung and Ngarinyman show that they exhibit both patterns: ‘given-before-new’ in the encoding of Aboutness topics, and ‘more-newsworthy-first’ in that of Argument focus, contrastive topics and new discourse topics and Framesetting topics. Clearly defining the unit of prosodic analysis is essential for a better typological characterisation of the observed patterns; widening our perspective to units larger than IUs will better account for the interplay of information structural categories.

References
Simard, Candide. 2010. The Prosodic Contours of Jaminjung, a language of Northern Australia, PhD dissertation University of Manchester.
Discovering informational structural generalizations in spoken corpora:  
A case study in Georgian  
Stavros Skopeteas

The concepts of topic and focus involve assumptions about the way speakers signal the contribution of the utterance to the common ground (e.g., with the placement of pitch accents or the choice of marked syntactic constructions). There is an intrinsic limitation in discovering the information state of clausal domains in observational data, namely that this data does not offer a direct access to the intention of the speaker. This intention may be partly predicted by the context, but the relation between contextual properties and target utterance is not 1:1. I.e., different information structures are possible within one and the same context depending on the intention of the speaker.

The present study deals with this empirical challenge with examining the properties of focus in Georgian in a corpus of semi-spontaneous narratives (the corpus contains spoken data by 24 speakers producing the same five narratives, i.e., 5*24=120 texts). Two effects of focus on sentence form are examined: (a) syntax: in the preverbal domain, the focus is left adjacent to the verb (see Alkhazishvili 1959, Harris 1981: 14), (b) prosody: focus is not expressed by pitch accents but through phrasing (Skopeteas and Féry 2010).

The results of the corpus study largely confirm the generalizations that were obtained in the previous research. However, the findings in the naturalistic data display additional variance that is traced back to the following sources: (a) limitations in the accuracy of the contextual predictors; (b) a strong preference for avoiding structural markedness – even if the context licenses it; (c) pure effects of incremental production that reduce the informativity of prosodic realization.

References
Multiple focusing strategies: evidence from Kakataibo

Daniel Valle Arevalo

This paper discusses the prosodic and morpho-syntactic properties of the focusing strategies in Kakataibo, (ISO 639,3 code ‘cbr’), a Panoan language spoken by 1500 people in the Peruvian Amazon (Frank 1994). It is found that Kakataibo exploits a wide variety of grammatical features including f0 variation, changes in constituent order and morphological marking in order to indicate focus, although not in an obligatory fashion. Given this diversity of focusing strategies, the Kakataibo data problematizes the unitary and cohesive status of focus as an analytical tool (Matić and Wedgwood 2013).

The data from which this research is drawn comes from a corpus of more than 18 hours of natural occurring discourse from different genera such as conversations, procedural texts and narratives collected under an ELDP-funded documentation project. In addition, elicitation sessions targeting IS categories using auditive and visual stimuli have been carried out. The focusing strategies reported here were all found in natural discourse, but only a subset of them was identified in the experimentally collected data.

Kakataibo shows a templatic clause structure within the frame of the obligatory second position clitic complex and the final main clause verb. This structure leaves room for two positions, the prefield, occurring before the clitic complex and the middle field, between the clitic complex and the final verb, as in (1). Constituent order is SOV in out of the blue sentences but it may vary in order to fit IS needs. Subjects are cross-referenced by obligatory clitics in the second-position clitic complex. Third person objects are recoverable by zero anaphora.

(1)  ____ 2CL ____ V

Focus in Kakataibo is signaled by different strategies depending on the focus type and its scope. Narrow-focused constituents usually occur in the pre-field position, or in a less frequent strategy, they occur in the right periphery, following the verb, in a phrase detached from the main clause by a pause. Notice that the pre-field position can also be occupied by non-focus material, such as frame-setters. The occurrence of term focus in the sentence edges is usually accompanied by the presence of the highest f0, but not always so. In contrast, VP and predicate focus occur in situ, at the end of the utterance and usually carry the highest pitch. Contrastive focus in Kakataibo is usually marked in the same way as information focus. However, the emphatic clitic =bi and the modal second-position clitic =kuni may be optionally added for contrast to narrow focused constituents and the whole clause, respectively.

Generalizations based on more studied languages prove to be able to capture the basic properties of the Kakataibo focusing strategies, such as giving prominence to the focus (Truckenbrodt 1995) and exploiting the clause’s peripheries to this end (Zubizarreta 1998, Van Valin 2005), which in turn informs the grammatical analysis. At the same time, the Kakataibo data is problematic for the concept of focus in that it is not apparent how a single feature may trigger the wide variety of grammatical patterns signaling focus that have been surveyed here.

References


Topics, afterthoughts and prosody in Beja (North-Cushitic)
Martine Vanhove

Beja (North-Cushitic, Afro-Asiatic), like most Cushitic languages, is considered an SOV language and lacks dedicated topic or focus markers or constructions (although some devices may function, rarely, as focusing ones). Spontaneous data recorded in Sudan during the last 15 years show that the SOV constituent order is not rigid and that it may vary to fit information structure needs.

S is indexed on nonfinite verbs and a lexical or pronominal subject is not obligatorily expressed. But S systematically surfaces when a new referent (at the beginning of a sequence – cf. Moneglia and Cresti 2006 – or contrasting to a previous referent in the context, or extracting one referent among a set of referents previously mentioned) is introduced. The data shows that prosody is an important cue that helps differentiate between the grammatical function of S and its function at the level of information structure. When a lexical or pronominal form at the nominative case is prosodically detached from the rest of the utterance either by a break with a continuing contour, most often followed by a pause (fig. 1), or, rarely, by a terminal break with a falling contour, even if still conforming to the canonical order, S functions as a topic. Its pitch and exact prosodic contour may vary from H, to HL (in case of terminal break), or, rarely, to M. Conversely, the prosodic integration of S within the same IU as the verb, and a L or M pitch range are the prosodic cues that indicate that S is not a topic but a grammatical subject (fig. 2). This prosodic difference does not hold true when S belongs to the long set of “emphatic” personal pronouns.

S may also occur after the verb in which case it functions as an afterthought topic shift, as all constituents occurring after the verb. It may occur in a separate intonation unit (IU) or in the same IU as the rest of an utterance (fig. 3), but is always pronounced at a lower average pitch range than the preceding context or IU, and often with a rather flat prosodic contour.

An OSV constituent order is also found (rarely). In this order, O is always topicalized but, contrary to a topicalized S, it may or may not be included in the same IU as S and V, and its pitch is always H.

Based on a 1.5 hour-online pilot corpus, sound aligned, segmented into prosodic units and fully glossed and annotated for grammatical categories (partly available online at http://dx.doi.org/10.1075/scl.68. website), this presentation will discuss the relationship of topicalization and afterthoughts with prosody in Beja and propose an annotation system for retrieval purposes in ELAN.

Reference
Fig. 1

HEU_MV_NARR_03_PARMER

<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Pitch (Hz)</th>
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<tbody>
<tr>
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<td>200</td>
</tr>
<tr>
<td>212.1</td>
<td>200</td>
</tr>
</tbody>
</table>

This smoke goes well high like that and

Fig. 2

HEU_MV_NARR_03_CAMEL

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<thead>
<tr>
<th>Time (s)</th>
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</thead>
<tbody>
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<tr>
<td>77.55</td>
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</tbody>
</table>

When these men came,

Fig. 3

HEU_MV_NARR_01_SHELTER

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<tr>
<th>Time (s)</th>
<th>Pitch (Hz)</th>
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</thead>
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<td>32.79</td>
<td>200</td>
</tr>
<tr>
<td>32.95</td>
<td>200</td>
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</tbody>
</table>

He was carrying a lamb on his shoulder, the man,
Prosodic correlates of information structure values in a tone language
Alexandra Vydrina

The current research is a contribution to the debate about the correlates of information structure categories in prosody. One long-contended issue is whether prosodic prominence can be considered as a universal correlate of focus, see Büring (2009), Selkirk (2011) in support of this hypothesis and Downing (2012), Rialland & Robert (2001) against it. There are also attempts to provide a list of intonemes which signal specific discourse values, an interesting example of it can be found in (Steedman 2007). I address the question of how to delimit lexical, syntactic and pragmatic functions of tone on the example of Kakabe language (<Mande, endangered). The question about how intonation can coexist with lexical tone is only beginning to be the subject of specialized discussion in literature (Hyman & Monaka 2011), and, to my knowledge, this problem has not been at issue for any of Mande languages so far.

The analysis is based on an oral corpus, containing more than six hours of spontaneous texts recorded in Guinea in 2013-2015. Kakabe is a tone language, which, according to the definition by L. Hyman (2001) means that "pitch enters into the lexical realization of at least some morphemes". Crucially, the participation of tone in the lexical realization is very restricted in Kakabe. The only category where tone is purely lexical and stable in any position within an utterance, are full nouns, e.g. bàa L 'goat' vs. báa H 'river'. Verbs also have arbitrary lexical tone, e.g. kɛ̀ 'happen' vs. kɛ́ 'defecate', yet in most cases it is neutralized in the utterance (one of the few the exceptions is an imperative with a pronominal DO or a perfective intransitive clause with a pronominal subject). Apart from this restricted case of lexical specification, tone is conditioned by the syntactic position of the morphemes in the clause and/or by their discourse functions. For example, adjectives always copy the tone of the head of the NP. The tonal behavior of determiners is a rather straightforward reflection of their discourse function: determiners like wo 'that', ke 'this', tugun 'also' are integrated into the prosodic group of the head noun and bear a falling tone, whereas the quantifiers like fo 'every', dɔrn 'only', which also occupy the rightmost position within the noun phrase, create an independent prosodic group and are pronounced with a high tone. I will analyze the internal architecture of the Kakabe noun phrase and its prosodic correlate and compare it with the prosodic structure of the finite clause. Both the anchoring of referent and assertion are associated with one intoneme, namely, falling contour. In general, topical elements at the level of noun phrase (pronominal possessors, demonstratives as determiners) intonationally and syntactically behave in the same way as topical elements at the level of finite clause.

References


Basic constituent order and information-structural functions of constituent order variation in Savosavo (Papuan) and Gela (Oceanic) corpus data
Claudia Wegener

While for some languages it may not make sense to posit a basic (or unmarked) constituent order (‘pragmatically based languages’, e.g. Cayuga, Mithun (1992: 58)), for others it is possible, and different criteria have been used to identify which constituent order is basic. Downing (1995) remarked that, from a functionalist perspective, there are competing cognitive motivations for different word orders (e.g. theme-first or rheme-first principles, Downing 1995: 13f.), and “because of the existence of competing, equally well-motivated options, we cannot predict which option a given language may choose” (Downing 1995: 3, emphasis in the original). The fact that a basic constituent order can be identified in a language does of course not preclude the occurrence of other orders, usually in more or less clearly defined and restricted contexts. However, not all languages show the same amount of variation in constituent order, and the variation they show is not random: Steele (1978: 601) observed that languages with different basic constituent orders show different patterns of variation. As for the functions of constituent order variants, the close connection with information structural categories such as different types of topic and focus has been shown for many languages, e.g. Mayan (Aissen 1992), Cheke Holo (Palmer 2009), and Berber (Mettouchi & Fleisch 2010).

This talk explores the variation of constituent order in corpus data from two unrelated, but neighboring languages spoken in Solomon Islands, Savosavo (Papuan) and Gela (Oceanic). For both, basic constituent orders can be established: AOV/SV for Savosavo, and VOA/VS for Gela. Recordings from four different genres (narratives, procedurals, interviews and elicitation games) were selected and coded for constituent order and clause type (declarative, interrogative, imperative, cosubordinate or subordinate). The results show that, with respect of the ordering of the arguments in relation to the verb, there is much less variation in Savosavo than in Gela: in Savosavo, 96% of all arguments (pronominal NP or lexical NP) precede the verb, i.e. the verb-final order is quite strictly observed. In Gela, only 75% of NP arguments follow the verb.

Interestingly, the main reason for this lies not in what is different in these two languages, but in what is similar: while their basic word order seems to give preference to different functional motivations, both languages use particular positions at the beginning and end of the clause for similar purposes, i.e. to mark different types of topic and focus. In this talk I will describe the particular positions and their respective functions for both languages, and demonstrate how these shared information structural strategies explain the observed differences in constituent order variation.

References