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This research topic of yours — Is it a research topic at all? Using comparative interactional data for a fine-grained reanalysis of traditional concepts

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Abstract

This paper demonstrates how bottom-up research on interactional data offers the opportunity of disentangling presumably basic linguistic notions into smaller primitives. Using parallel case studies on interrogatives and left dislocations from two unrelated languages (Modern Hebrew and Anal Naga), the paper shows how avoiding restrictive definitions and recurrently expanding the set of examples results in a revision of concepts, taken for granted at the beginning of the study. The findings emphasise the need for channelling corpus-based research into an interactionally-informed examination of the metalanguage employed for the analysis. They illustrate how studying a research topic and questioning the validity of the concepts that underlie it are part of the same process.

Keywords: interactional linguistics, topic, question, left dislocation

1 Introduction

One of the many important achievements of typological corpus-based research is the re-modelling of the traditional toolbox of basic linguistic concepts. Sets of classical notions, such as lexical classes and grammatical relations, have been replaced by fine-grained analyses of cross-linguistically diverse structural primitives (cf. low-level feature metalanguage, Levinson & Evans 2010; multivariate typology, Bickel 2015). Traditional linguistic notions are remodelled as family-resemblance phenomena, where languagespecific cases represent different clusters of more basic features. This analytical procedure allows to pinpoint similarities and differences of related phenomena, without lumping them under pre-assumed cover-terms (e.g. Haspelmath 2012 for lexical classes).

As this contribution aims to demonstrate, analyses of multimedia corpora of natural interaction offer the opportunity to advance such bottom-up explorations of apparent basic concepts. Studying an expression of a "concept X" or a "construction Y" in natural interaction becomes inseparable from decomposing the object of the study into more primitive factors. The following sections present studies on language-specific forms which would traditionally be regarded as interrogatives that mostly express questions (Section 2) and topicalising left dislocations (LD, Section 3). However, all studies ended up with the decomposition of the examined structures, and the respective representation of their apparent functions as by-products of more primitive factors.

The outlined decomposition of theoretical concepts and morphosyntactic structures originates primarily in the re-orientation of the analysis from the study of sentence-based discourse to the study of interaction (Couper-Kuhlen & Selting 2018). In interactional approaches, the functions of the examined forms are linked not to pre-assumed morphosyntactic and pragmatic concepts, but to local moves, that speakers perform for the achievement of their communicative goals. Specific markers are found to be related to diverse interactional factors, many of which traditionally played a marginal role in morphosyntactic analysis: establishment of joint attention, addressee selection, turn-taking, foreshadowing of the upcoming action, establishment of communicative channel and more. The function of each marker is studied

through interactional cues co-occurring with it. Instead of restricting or prematurely mapping this function onto an existing pre-assumed concept, the study evolves into the examination of interactional moves that speakers perform using this marker across its overall distribution in the corpus. The seemingly prototypical usages turn out in this process to be by-products of more basic interactional functions.

An additional relevant difference between interactional and traditional morphosyntactic analyses lies in the domain of the studied units. Interactionally-oriented studies find that local interactional moves can be accomplished by sub-sentential units (e.g. Laury et al. 2019; cf. also Izre'el 2018 for Modern Hebrew) and multimodally (Stivers & Sidnell 2005). As a result, traditional sentence-level phenomena are re-analysed in this approach as consecutive or simultaneous moves with a local interaction managing contribution. Consequently, findings of interactionally-informed studies challenge both traditional linguistic concepts and received views of sentence-based grammar.

The overall number of examples originally examined in the studies presented below ranges between one hundred and a few hundred tokens. This is sufficient for examining a broad scope of usages, but small enough for the individual treatment and cross-examination of examples, necessary for the identification of previously overlooked factors. The criteria for the inclusion of an example in the study are form-driven: Once a certain form is identified as relevant for the study, the corpus is re-examined for all the occurrences of this form. The form is analysed then independently and irrespective of the original research question. In fact, examples where the contribution of the form deviates from the original assumptions are often crucial for tracing its distinct function.

The studies outlined below explore data from two unrelated, typologically different languages spoken in dissimilar communities: Modern (Israeli) Hebrew and Anal Naga. Modern Hebrew is a Semitic language with a nominative-accusative alignment of nominal arguments, S/A-indexing on the verb and a pragmatically driven constituent order. The corpus used for the study is CoSIH¹ (Izre'el et al. 2001). This is a collection of recordings of

¹ https://cosih.com/english/audio-and-data.html

natural interaction of multiple participants (2–5 speakers) in their everyday environment, partitioned into Intonation Units. The transcription uses the ELAN software (2020; Wittenburg et al. 2006). The data used for each study consists of two hours (c. 6000 Intonation Units) of audio-recordings, selected due to the quality of the recording, accuracy of transcription and absence of long silent parts.

Anal Naga is a Trans-Himalayan (Tibeto-Burman) language, of a minority community in north-eastern India. It has an ergative-absolutive alignment of nominal arguments, hierarchical person indexation on the verb, and a strong tendency for verb-final syntax. The corpus used for the study is a collection of multimedia recordings of spontaneous speech (Ozerov 2018). The corpus was compiled, transcribed and translated into English in the ELAN software by the community members, with the support of ELDP.² The transcription roughly follows the partition into utterances. The studies are based on one hour of recordings (c. 2000 utterances), selected from the larger corpus due to the sound quality and audibility of the speakers, as well as the naturalness of the interaction. The recordings represent natural conversation of multiple participants (2–9 speakers) in their everyday settings, such as leisure time and food preparation, with no (or very short) sections of camera-directed monologues.

2 This is a question, isn't it?

2.1 Introduction

It is commonly acknowledged that "questions" do not constitute a uniform phenomenon, and much confusion was produced by the conflation of different levels of analysis (Hudson 1975; Huddleston 1994; Haan 2002). On the one hand, the study of questions deals with interrogatives — morphosyntactic structures regarded as a grammatical expression of information requests. On the other hand, the research addresses the various ways of accomplishing the social action of requesting information. The studies below deal primarily

² I thank ELDP for the grant SG0428 that made this project possible.

with the analysis of presumably interrogative structures, and therefore this section largely addresses the former, form-to-function perspective. However, as will be shown below, understanding the functions of the linguistic devices that constitute interrogative structures results in refined analyses of the social actions associated with questions.

It was originally assumed that interrogatives are a universally available structure, at least for content ("wh-") questions (Sadock & Zwicky 2017). While it is commonly known that interrogatives can have "rhetorical" interpretations, the research largely attempted to derive them pragmatically from genuine information requests (e.g. Rohde 2006). However, this sterile view appears as overly optimistic relative to linguistic data. For one thing, if an interrogative structure can have either an information-requesting or rhetorical contribution, we need to explain how the desired interpretation is obtained in each of the cases, including an account of what makes an interrogative structure function as an information request (Schegloff 1978; Heritage 2012). If each interpretation relies on specific pragmatic conditions or an additional dedicated linguistic marking, there is no evident reason to assume that requesting information constitutes the basic usage of the structure. Instead, its analysis should remain underspecified relative to the action it performs, as both question-like and "rhetorical" interpretations are products of special marking and/or pragmatics. Remarkably, interrogatives are used for genuine information requests only in around a third of naturally attested cases (Levinson 2012: 15; cf. also parallel findings below). In addition, some wh-forms inherently have a combined information-eliciting and argumentative meaning, blurring the distinction between genuine and rhetorical interpretations (Steensig & Drew 2008; Egbert & Vöge 2008). Other wh-constructions are "rhetorical" by default (Clayman & Heritage 2002) (such as what the hell and why don't you), suggesting the need for an account that does not rely on a pragmatic derivation of their meaning from an information request.

The contribution of *wh*-structures is a product of various structural, semantic and pragmatic factors. One such factor is the precise semantics of the *wh*-constituent. In many cases, it is possible to aim at a meaning of the *wh*word underspecified for the action associated with it (i.e. not an "information request", but e.g. "informational incompleteness", Fiengo 2007; or "a variable", Krifka 2011: 1783). This analysis allows for a unified account of information requesting and rhetorical interpretations of *wh*-sentences. Prosodic factors play a central role in the interpretation of interrogatives. For example, exploring the roles of each prosodic cue, such as the onset pitch (Sicoli et al. 2015), accentuation (Chen 2012), and the final contour (Couper-Kuhlen 2012) sheds light on the separate contribution of each device. Thus, shifting the study into a detailed research of the constituents of the examined structure (*wh*-word/construction, final contour, accent, and more) lets us explore the separate contribution of each of the forms. Moreover, since these forms are often not specialised for interrogatives, they can contribute merely their regular function. Consequently, disentangling the interrogative structures into their smaller constituents results in a representation of the overall meaning as an interplay of separately identifiable categories and pragmatic factors. Notably, studies that explore "questions" from the perspective of social action argue for a similarly fine-grained view on information-requesting acts (Stivers & Rossano 2010; Levinson 2012).

The case studies presented below address structures that appear to be good parallels of "content (*wh-*) interrogatives" in Modern Hebrew (Ozerov 2019) and of "interrogatives" in Anal Naga (Ozerov 2021b; in press). Both languages have a set of "interrogative pronouns" employed in the initial position of constituent questions, and a prosodic marking for polar questions. Yet, upon closer examination this unified picture decomposes both from the point of view of the form, and from the perspective of the social actions that these forms accomplish. Thus, apparent interrogatives are disentangled into finer linguistic categories, each of which represents an interactional move aimed at achieving specific communicative goals.

2.2 Content questions in Hebrew

Genuine content questions in Hebrew are characterised by an accented³ fronted "interrogative pronoun" and a final rising intonation occurring on

³ Accent in Hebrew is characterised by length, intensity, and pitch (Silber-Varod et al. 2016)). The pitch movement associated with the accent commonly exhibits late peaks, as the pitch reaches its maximum on the syllable that follows the accented one. This is the case in (1), as the pitch keeps rising throughout the first syllable of '*K*A- peaking only on *-ma*, as well as in *me*'*Efo* in 0 (peak on *fo*), and *le'MA* and *liz'Bok* in 0 (peaks on *li* and *et* respectively, that follow the accented syllables).

the last syllable of the Intonation Unit (Cohen 2009). This configuration is illustrated in (1). The software used is Praat (Boersma & Weenink 2020); the figures were generated with the script written by Elvira-García (2017).⁴

- (1) Speaker A says that she spends immense amounts of money on gas.
 A: bona, ha-Delek ha-ze, kobea oti omeb, χaval.al.hazman= Hey DEF-gas DEF-this rip.apart OBJ.1SG PN EXCLAUG
 'Hey, Omer, this gas makes me go bankrupt, totally.'
 - → B: κ_{Ama} oL-E l- $a\chi$ be- χ odef \uparrow how.much cost.PRES-SG.M to-2SG.F in-month 'How much does it cost (to) you monthly?' (Figure 1)
 - A: elef-matajim fekel. thousand-two.hundred shekel 'Twelve hundred shekels.' (OCD_1_sp1_001, OCD_1_sp3_018)

An absence of the final rise often corresponds to a rhetorical reading, shown in (2).

(2) L is designing an invitation to an exhibition organised for the occasion of a graduation from an art college. She asks her partner M for his opinion. M finds the design incomprehensible, triggering a heated argument.

⁴ Morphological glossing follows the Leipzig Glossing Rules. Additional abbreviations: ADD – additive; AUG – augmentative; CIS – cislocative; DEM1 – proximate demonstrative (next to speaker); DEM2 – distal (next to addressee); DIR – directive; DM – discourse marker; DUB – dubitative; EXCL – exclamation; EXIST – existential; EXPR – experiential; HORZ – horizontal motion; JUSS – jussive; N.FUT – non-future; POL – politeness; PURP – purpose; PROB – probability; VOC – vocative.

Prosody notation: \langle , \rangle – continuing boundary tone; $\langle . \rangle$ – falling boundary tone; $\langle ? \rangle$ – final high rise (in Hebrew); $\langle ... \times ... \rangle$ – pause (where x is the duration in milliseconds); $\langle :: \rangle$ – hesitation lengthening; $\langle = \rangle$ – latching, $\langle SMALL CAPITALS \rangle$ – accent, with underline – extra-high accent.

- a. L: ha-injan hu siJUM. [tkuFA].
 DEF-matter 3sG finish period
 'The issue is the end. [Of] a period.'
- → b. M: [MA.ze ha]-injan hu sijum ↓ what DEF-matter 3sg finish

'What does it mean at all "The issue is the end".'

 \rightarrow **c.** $E\chi$ ZE $ole\chi$ $limfo\chi$ et=a:: mi=fe=kobe et=ze how this going to.attract OBJ=DEF who=that=read.PRES OBJ=it

lavo l-a-taaвuχA ↓ to.come to-DEF-exhibition

'How is this thing going to attract the... the person who reads it to come to the exhibition?!' (Figure 2)

d. L: ...832... ha-injan hu- la- LO=limfox lavo l-a-taaвиχA DEF-matter 3sg to- NEG-attract come to-DEF-exhibition

> *ela leva- le::- le::- ..260.. lefaвsем taaви*а= but to.XX to- to- to.advertise exhibition

'The matter is, to- not to attract people to come to an exhibition, but to ehm- to- to- ... to ADVERTISE an exhibition.'

→ e. M:

'lama 'LO ↓ why not 'Why not!'

f. at tsвiχ-a lefarsem taaвиχA, at tsвiχ-a limfox 2sg.F need-F to.advertise exhibition 2sg.F need-F to.attract

апа∫ім.

people

'You should advertise an exhibition (means) you should attract people.' (D342a 261–274'')



Figure 1 Example (1) – "prototypical question", accented question word and final rise.

As L tries to explain her idea in (2a), M challenges it, interrupting and repeating L's utterance within the interrogative-like *ma.ze* (literally 'what's that') construction with the final fall in (2b). He immediately proceeds with another interrogative structure in (2c) terminated with a falling pitch (Figure 2). At this point, he cedes the floor to L. However, she treats (2c) not as a question, but as a challenging claim against her position. She pauses and embarks on an incremental, hesitated, and defensive self-justification (2d), rather than an answer to the question. While she counters M by explaining that attracting people is not her goal, M's latching (2e) challenges also this statement. It is formulated again as an interrogative with a final fall, yet the speaker keeps again the floor, proceeding to argue against L's statement (2d). Thus, interrogative structures with a falling final contour are used thrice by M throughout this example for challenging and disagreement.

Based on the comparison of (1) and (2), it could be concluded that the final rise in Hebrew content interrogatives functions as the marker of requesting information, allowing to distinguish them from rhetorical uses of the structure (Cohen 2009). In this case, Hebrew would conform to the crosslinguistically common pattern where final rises are associated with questions (Haan 2002: 37). This analysis already casts doubt on the interrogative nature



Figure 2 Example (2c) – challenging "interrogative", accented question word and no final rise.

of *wh*-sentences: If they require a special marking to acquire the question interpretation, then the basic structure requires an underspecified analysis that would encompass all readings, with no priority to information requests. This observation already suggests the possibility of decomposing the overall structure and its functions into smaller "building blocks", the final contour being one of them. Moreover, it indicates the need for exploring the function of the final contour more broadly. Its analysis as an interrogative is a by-product of the data restriction to *wh*-utterances, due to the original research question.

This study originally intended to explore the contribution of prosody to the meaning of *wh*-sentences in Hebrew, based on 164 examples extracted from the corpus. The examples were annotated for accents and final contours. This initial dataset was later enriched with examples of a specific final contour ("small rise"/ L-H%), and the study expanded into an additional substudy of its function. Expanding the range of the examined data to all the occurrences of this final contour reveals its broader distribution and functionality. It is also found:

- a. with modal declaratives, converting them into help requests (*I want to fix it* ↑ means 'Help me fix it, please'.)
- **b.** with imperatives, hedging them into personal requests, offers and suggestions
- c. with stance expressions, as an invitation for stance-alignment
- d. in opening greetings, as an invitation for a responsive greeting
- e. with discourse markers, inviting a follow up talk (cf. nu in (3d) below)

This set of usages suggests that the final rise occurs in a family of contexts generalisable as *personalised appeals for the addressee's collaborative action*. Importantly, this interactional function also encompasses information requests, with no need for postulating a dedicated interrogative meaning. Moreover, the final rise can be absent from genuine questions, if the personalised appeal for a response is produced by other means, such as an explicit wording of this action (e.g. *Tell me*).

Another relevant contribution in (1) and (2c) is produced by the *wh*-word. Although it is often taken for granted to be "interrogative", the problems of aligning this traditional definition with the data may be an evidence that the concept of "interrogativity" is too coarse for the analysis. Remarkably, only 37% of the examined 164 examples are genuine questions. An alternative analysis that equally applies to the data is the view of the *wh*-constituent as an expression of a speaker's inability or avoidance of conveying information (Fiengo 2007), an information gap. This meaning is further specified for the semantic class of the gap ('what' – a thing, 'where' – a place, etc.). In this analysis, a genuine question in (1) can be decomposed into a combination of a display of a lack of knowledge (*wh*-word) combined with an appeal for

the addressee's responsive action (final rise). In (2), M expresses his lack of knowledge regarding the attractivity of the discussed design, but seeks no collaboration from the interlocutor. Consequently, it has no question-like interpretation. Against the context of L's convincement that the design is good, M's expression of incomprehension about the quality of the design is interpreted as a challenge. In a context where none of the interlocutors is expected to possess the knowledge, an expression of a gap conveys mere inability to comprehend the situation and a lack of information. This can be seen in (3), where the speaker obtains no response for her *wh*-sentence and proceeds to wonder on the topic.

(3) D tells her parents that she found a worm on the wall of her room.

a. A: ani meod muDEF-et me=a-toLAat ha-zoti
 1sG very worried-F from=DEF-worm DEF-this.F
 b=a-χedeʁ etsl-i.
 in=DEF-room at-1sG
 'I am really worried because of this worm in my room.'

- **b. B:** *eze* toLAat. which worm 'Which worm?'
- c. A: haj-ta al=a-kiв toLAat, kmo betoχ PBI kaze was-3F on=DEF-wall worm like inside fruit like.that

 $\int e=je\int tolaiM?$ that=EXIST worms

'There was a worm on the wall, like in a fruit that there are worms [inside]?'

d. B: *nu* ↑ so 'So what?'



Figure 3 Example (3e) – incomprehension, accented wh-word; no final rise.

- → e. A: $al=a-\underline{KIB}$. me-Efo iGIa le-fam toLAat on=DEF-wall from-where arrive.PAST.3SG to-there worm 'On the wall! Where did a worm get there from?' (Figure 3)
 - f. ...1220... im ze ba mitoχ a-κιβ, ani LO=jodaat ma.
 if it came from DEF-wall 1sg NEG=know what
 'If it came from inside the wall, I really don't know what to-'
 <mumbling> (C711_2 280.5'')

The variability of response types following *wh*-sentences with a final falling contour – compare (2) and (3) – suggests that this prosody does not elicit a definite type of an addressee's action. The actual choice of the continuation is accountable by pragmatic factors, while the falling tone merely signals turn-termination.

The *wh*-word can additionally include an argumentative meaning constituent. In addition to expressing incomprehension or ignorance, this kind of *wh*-words conveys the speaker's positioning regarding the information gap, for instance that it is unimportant or ridiculous (*I don't know because there is* nothing to know). This is the case with the Hebrew construction $le=ma \ l-X$ INF.Y 'Why would X do Y?'. Notice how in (4) the *wh*-sentence acquires no questioning interpretation despite the final rise. Since the *wh*-word additionally expresses the speaker's positioning towards her incomprehension, the final rise is rather an appeal for aligning with her stance.

- (4) N and D inspect laundry bags used for washing underwear in a public laundry in the kibbutz.
 - a. D: ze axfav horse-ti me=asiz-or, ze haja be=asiz-or it now took.out-1sg from=package-PL it was in=package-PL eze fnat-Ajim. like year-DUAL

'I unpacked it now, it was packed for like two years.'

<cleans their nose>

- b. N: ani lo=maamiN-A fe=jef dvaB-im ka.ele fe=<inaudible>.
 1SG NEG=believe-F that=EXIST thing-PL like.that
 'I can't believe that there are these things that...'
- **c. D:** *ki:: ani jada-ti* $\int e=ani$ *e-tstaßex et=ze axaß.kax* because 1sg knew-1sg that=1sg 1sg-Fut.need obj=this later

∫∪v.paam, again

 \rightarrow az le-MA l-i lizBOK et=ze \uparrow so for-what for-1sG to.throw.away OBJ=this

'Because eh I knew I would need it later, so why would I throw it away?' (Figure 4)

...1030...



Figure 4 Example (4c) – final rise in a *wh*-sentence for stance alignment.

d. *kfe::=azav-ti et=a-kiBUTS*, *az sam-ti et=ze* when=left-1SG OBJ=DEF-kibbutz then put-1SG OBJ=this

> be=aʁgaz-im, ki b=a- b=a-iʁ ani LO=tsʁiχ-a in=box-PL because in=DEF- in=DEF-city 1sG NEG=need-F et=ze OBJ=this 'As... I was leaving the kibbutz, I packed it in boxes, because in- in the city I don't need it.' (C711_0_sp2_120, C711_0_sp1_097-101)

In (4b), speaker N expresses her disbelief regarding D's behaviour – what appears to hint at an accusation in hoarding. Speaker D opens her countermove in (4c) with an elongated *ki* 'because', foreshadowing an explanation. After justifying her behaviour (*I knew I would need it later*), she finalises the turn with the '*why to X Y.INF*'-construction (*why would I throw it away*) with the rising contour. By this utterance, she positions herself as regarding Y (throwing useful things away) senseless and inviting a responsive action (namely, an acceptance of this self-justification and an alignment with this position). However, N does not take the floor. As a result, after a pause D attempts to

achieve the goal again by other means in (4d). Finally, instead of responding, N changes the topic abruptly.

The last relevant notion to be discussed here is the speaker's communicative goals as expressed by the prosodic accent. In (1-4) the *wh*-words are accented, as the speaker aims to direct the addressee's attention at the information gap as their primary goal. In 17% of the examples, it is additionally coloured by para-linguistic cues such as laughter or an emotive falsetto. In these cases, it jointly expresses the existence of the gap, its status as a primary goal and the speaker's affective stance. An absence of an accent on the *wh*-word observed in 12.5% of cases indicates that the speaker has no interest in this information. These are exclamations of puzzlement, produced by speakers confronted with an event that they fail to comprehend. Hence, typologically unremarkable "content interrogatives" in Hebrew decompose into a set of more basic, directly marked factors listed below, whose cooccurrence is summarised in Table 1.

- **a.** The *wh*-word expresses an information gap.
 - It also potentially conveys argumentative meaning, such as the unimportance or unlikelihood of the gap, as in the construction in (4), challenging attitude, as in the construction ma.ze X 'what does it mean at all X' in (2).
- **b.** The accent on the *wh*-word indicates that directing attention at the gap is the main communicative goal of the speaker.
- **c.** Para-linguistic cues on the *wh*-word express speakers' affective stance and argumentative meaning with respect to the gap, such as surprise or disagreement.
- **d.** The final small rise requests a collaborative action from the addressee.

Prototypical questions emerge in this account as a complex set of moves consisting of:

- **a.** an expression of an information gap (*wh*-word);
- indication that aligning attention at this gap is the primary communicative goal of the speaker (accent on the *wh*-word);
- neutral emotive stance (no argumentative *wh*-words, no paralinguistic cues);

	not <i>wh-accented</i> (no interest in the gap)	<i>wh-accented</i> (interest in the gap)	<i>wh-"para"-accented</i> (emotive/argumentative positioning towards the gap)
low/falling intonation (no appeal)	i. 10.0%	ii. 32.0%	iii. 13.0%
small rise (appeal for collaborative action)	iv. 2.5%	v. 30.5%	vi. 4.0%

 Table 1
 Summary of the prosodic marking of wh-utterances in Hebrew.

d. an invitation to collaboratively act with respect to the utterance (final rise).

This construal is found only with 30.5% of the examined examples (cell v. in Table 1). "Rhetorical questions" break down into different clusters, with a clear delineation between kinds of "rhetoricity":

- a. utterances showing no interest in information that function as exclamations of puzzlement (de-accented "*wh*"-word in cells i. and iv.);
- expression of emotive stance and argumentative meaning regarding the lack of comprehension (stance-conveying prosody of the *wh*-items in cells iii. and vi. or dedicated lexical items/constructions, such as *what the hell*);
- c. expression of incomprehension or lack of knowledge with no invitation to act in this respect (no final rise in i.–iii.).

2.3 Questions in Anal Naga

This study addressed apparent interrogative utterances in Anal Naga (Ozerov, in press). The structures obtained in elicitation for polarity questions in the language exhibit a final rising-falling contour (transcribed as \nearrow), combined with a strong accent on the last syllable of the intonation unit. This prosody occurs on the last syllable of (5b) and (5f) below, the latter being shown in Figure 5, which are indeed responded as genuine information requests. The final

rise-fall is contrasted with a regular falling prosody, illustrated in Figure 6. Information requests can also be marked by the final particle =mo known to be a widespread question marker in many related languages (Peterson 2017: 202). This particle (and its variant =me) can be seen in (5g), (5h), and (5l). Content questions are formed by a dedicated set of "content-question words", such as $akh^h \delta$ 'where', $d\dot{a}$: 'what' and its derivatives, shown in (5g) and (5l). They can additionally be marked by the final =mo/me.

- (5) Speaker A discusses his preparations for the harvesting season, that include travelling to the nearby town. Others inquire about the timing of this trip, as it coincides with the joint trip of other men from the village to a very distant town.
 - a. A: bú i-lí-na t^horã: i-tà i-tcá:-há food NMLZ-take-NMLZ preparation NMLZ-do NMLZ-go-to i-tà-vá=ve.
 NMLZ-need-N.FUT=DIR
 'I have to go and prepare for harvesting.'
 - → b. B: mà:r-dú i-júŋ-r^háŋ-vá-hìn-ti↗↘ food-before NMLZ-go.down-PURP-COP-PL-2 'Are you going before the lunchtime?'
 - **c. D:** *m*: mhm 'Yes.'
 - d. A: mà:l-dú mà:l-t^hal=te food-before food-after=CNTR 'Before food, after food...'

...1798...

Using comparative interactional data for reanalyzing traditional concepts

e. B: *a-a-váŋ-pe.r^he vè:lé* 2-CIS-go-as.soon.as not.staying.overnight *i-jú-r^haŋ-ti=ve* NMLZ-go.down-FUT-2=DIR

'So as soon as you are back, you will have to leave for a return trip?!'

- → f. C: a-vàŋ-tò-má-r^báŋ-vá-je↗↘
 2-go-follow-NEG-FUT-COP-3PL
 'Are you not going to follow them?' (Figure 5)
 - g. A: ak^hò-há=mo where-to=DUB 'Where to?'

<two intonation units omitted>

- h. A: pək^hù i-dá i-tà=mo
 bee NMLZ-burn NMLZ-do=DUB
 'To smoke bees?'
- i. C+D+E: mae=ve no=DIR 'No!'
- j. C: sope i-[k^bàl-to]_{OVERLAP1} army NMLZ-select-ABS 'The army recruitment'
- k. B: [Sena[[pati]_{OVERLAP1}-há]]_{OVERLAP2} PN-to 'To Senapati'
- I. A: [[as:: dá:.to]]_{OVERLAP2} váŋ-ká-niŋ=me ugh what.for go-AFF-1SG=DUB 'Ugh, why should I go?'



Figure 5 Example (5f) - final rise-fall and accent with information request

 wa-núm-hín váŋ-já:-vá-jè-sò, na-athá.núm-mi
 3-alone-PL go-just-COP-PL-JUSS 1sG-have.interest-NEG
 'Let them go by themselves, I'm not interested'. (anm_20161210_phiran_khullen_porcupine_1 12'36''-12'57'')

There are 268 examples characterised by at least one of the three features above (final rise-fall, *=mo*, and/or a content-question word). These examples were included in the sample irrespective of whether the utterance obtained a question-like interpretation or not. However, as the analysis below outlines, none of the markers or combinations thereof constitutes an "interrogative". Instead, they express different interactional instructions, potentially giving rise to an interpretation of an information request.

The most common cue in the data is the final rise-fall (Ozerov 2021b), found in 61% of information requests. Within the subset of utterances that have a possible question reading, this contour is particularly salient in polar questions, occurring in 82% of the cases. However, the examination of its entire distribution reveals that only 35% of the examples can be interpreted as a question. Although this is the largest group of the identified functions, most examples are found in other contexts, shown in Table 2.

	marked utterance	typical response	% of total
i.	hedged commands, offers and suggestions	physical action; negotiation	14.0%
ii.	request for confirmation that the addressee comprehends the non-trivial contribution of an utterance (explanation, justification, culmination, foreshadowing upcoming content, referent identification)	back-channelling and/or nodding	23.3%
iii.	turn-taking by a "dispreferred" participant	back-channelling, gazing and/or nodding	12.3%
iv.	stance-alignment	back-channelling and/or nodding	12.3%
v.	vocatives, calls	acknowledgment of contact	3.0%

Table 2Functions of final rise-fall in Anal Naga.

The function of the final rise-fall can be generalised in a parallel way to the final rise in Hebrew: It is a *request for a collaborative responsive action*. Again, there is no need to postulate a separate interrogative function for this marker, as the more general interactional function also encompasses information requests.

The utterance final marker =mo expresses the speaker's low epistemic status, in contradiction to their own expectations, a "mirative ignorance". It can prompt the interlocutors' assistance with the information, but does not explicitly request to do so. This is notable in (6), where the speaker does not give up the floor after employing =mo, and yet an interlocutor overlaps to support the statement.

- (6) The interlocutors discuss problems involved in raising cattle.
 - A: tcam^hù...-he... asʉ:l va-tcá:-l^hó-màŋ=mo dá:.mo. cow-DEM1 grass 3-eat-more-proB=DUB something 'The cows eat more grass, I guess, or something like that.' (Figure 6)



Figure 6 Example (6) – final fall.

B: [va-tcá:-l^hó-màŋ=mo dá:.mo]_{OVERLAP1}.
3-eat-more-PROB=DUB something
'I guess they eat more.'
A: [XX]_{OVERLAP1} astil-he i-tàŋ-dó:-dó:-va, ... grass-DEM1 NMLZ-get.over-away-away-N.FUT

'...so the grass gets over.'

 $(anm_20160917_LamphouPasna_Thotson_teashop~4'49''-4'53'')$

Similarly, the usage of *=mo* in the clarification request in (5h) does not convey the question status of the utterance, but the speaker's inability to comprehend others, due to an unexpected misalignment of shared assumptions and the ensuing speaker's lower epistemic status.

Finally, similarly to Hebrew, utterances with items traditionally considered to be "question (wh-)words" can be analysed as expressions of a speaker's avoidance or inability to complete the proposition. Consequently, these are rather "incompletion markers". This analysis accounts for their usage in genuine information requests, as well as in non-questioning statements. For example, in (7) the speaker merely displays his lack of knowledge.

The utterance foreshadows the content of the upcoming talk, which smoothly follows (7) with no pause or response from the interlocutors.

(7) dá:.há lì-há i-jú-k^hú-r^háŋ-va, ...
 how field-to NMLZ-go.down-again-FUT-COP
 'How will I go to the field'

(Continuation: 'It's such a problem, I have to reap corn and...') (anm_20161210_phiran_khullen_porcupine_1)

The primary motivation for the interpretation of incompletion markers as information requests appears to be the dissimilar epistemic status/authority of the interlocutors (Heritage 2012). Since in (7) the addressee has no authority over the information, the expression of the gap suggests no request for help. The same consideration applies to (5l). Here the speaker additionally uses =me (the hedged variant of =mo) conveying his low epistemic status regarding the others' idea of enlisting him in the military. Since this issue lies entirely within the speaker's epistemic authority, this move challenges the interlocutors' assumptions about him. If the addressee's epistemic status is assumed to be superior, the utterance is interpreted as an information request, as is the case in (8).

- (8) B enters for a brief visit to the house of A and C but refuses to stay, explaining that she is cooking. As she is leaving the house and crosses the doorstep with her back to A and C, A asks:
 - **a.** <gazing at the food in front of her>

A: dá: án a-t^hu':-tca=mo=e,∧ what curry 2-cook-POL=DUB=VOC 'What curry are you cooking?'

- b. <turning towards A and gazing at her>
 - B: taŋk^hariŋ type.of.jungle.vegetable 'the tangkharing fruit'

c. asà:n.lu ka-na-pər^hù-sá.
 yesterday.night 1sG-REL.P-BOIL-EXPR
 'that I boiled last night.'

Remarkably, there are only 9% of utterances with incompletion markers that function as pure information requests. The relative epistemic status typically involves various simultaneous factors, resulting in transient cases (additional 35% of information requests), which combine an information request with an additional, "rhetorical" meaning. This appears to be particularly the case with interlocutors who share intimate knowledge about each other, as is typical for communities in Anal Naga villages. Thus, in (8), A indeed requests information, but simultaneously expresses her surprise and lack of understanding (=mo) about the fact that B – her lonely old neighbour who has been out of food – is cooking a curry.

To summarise, Anal Naga appears at first sight to have proper interrogatives, with a prosodic marking for polar questions and typical fronted "*wh*interrogatives" for content questions. However, the question interpretation is an effect of a cluster of more basic and directly marked concepts, namely:

- a. an appeal for a collaborative responsive action (final rise-fall);
 35% thereof are found in information requests.
- **b.** an expression of a counter-expected low epistemic status (*=mo*);
- c. an expression of a gap in a speaker's knowledge/comprehension ("incompletion markers", commonly dubbed "*wh*-question words"); 44% thereof are found in utterances interpretable as potential information requests, possibly along with other accompanying interpretations.

2.4 Summary

The studies outlined here disentangle apparent interrogative structures into a set of basic markers with dedicated functions. This decomposition accounts for the various marking of the structure and its correlation with different discourse moves performed by it. Typologically unremarkable "interrogatives" in Hebrew and Anal Naga turn out in this analysis to be conglomerates of smaller building blocks:

- a. an appeal for a collaborative action: both languages employ deviant final intonation to mobilise a collaborative response of various kinds;
- b. information gap as inability or avoidance of conveying information: expressed in both languages by "wh"-pronouns ("incompletion markers");
- c. centring attention at the information gap (accent in Hebrew);
- d. counter-expected low epistemic status, which can prompt interlocutors to contribute information (*=mo* in Anal Naga);
- e. stance-expression by prosody and dedicated *wh*-words in Hebrew; it is yet unclear whether these have parallels in Anal Naga.

These findings have evident relevance for cross-linguistic studies of interrogatives. *Wh*-constituents are highly common in world languages, but so is their "rhetorical" usage. A special prosodic marking in questions is also a well-known feature, but so is its usage beyond the action of information requests (e.g. the final rise in English declaratives, see Westera 2018 for a recent overview; Smith nodate for phatic intonation in French; Warren 2016 for uptalk in English; also Kimps 2018 for tag-questions). In the light of these findings, the original research topic of the studies, namely how interrogatives are marked and used in the examined languages, turn out to be misguided. Speakers do not ask questions, nor do they assert using interrogatives rhetorically. Instead, they "navigate territories of knowledge" (Heritage 2012) relying on fine-grained discourse moves with a dedicated expression. They assess mutual knowledge, express comprehension gaps, direct attention at these gaps, position themselves regarding their incomprehension, and appeal for collaborative actions.

3 Left dislocation and topicality

3.1 Introduction

This section presents two additional parallel cases studies that demonstrate how broader data sampling and avoiding pre-assumed restrictive definitions result in a re-analysis of concepts that underlie original research questions. Left dislocation (LD) is traditionally defined as a family of structures where a non-verbal, most typically a referential lexical noun phrase (NP), occurs in a pre-clausal position, as a prosodically and/or syntactically separate constituent, illustrated in (9). The phenomenon is often regarded to be a universal property of unplanned discourse (Gundel 1988: 238).

(9) a. That woman over there, she comes from Berlin. (LD-proper)

 My work, I'm going crazy. (free/hanging topic) (both examples from Gómez-González 1997)

Due to its separate initial position, the fronted constituent establishes an interpretive frame for the subsequent clause. Consequently, LD is regarded as a topicalising structure in information structural approaches. The primary motivation for LD is proposed to lie in cognitive limitations of interlocutors' information processing, namely that activating a topical referent should be separate from construing a proposition about it (principle of separation of reference and tole (PSRR), Lambrecht 1994: 185). This analysis was successfully applied to spontaneous speech (Lambrecht 1981 and Kerr 2014 for French; Gregory & Michaelis 2001 and Netz & Kuzar 2007 for English). However, some views questioned the application of the proposition-level phenomenon of topic to extra-clausal NPs. LDs are alternatively viewed as stand-alone foci or monomial thetic statements (Bickel 1993: 93; Erteschik-Shir 1997: 53; cf. also Lambrecht 1994: 188).

Interactionally oriented studies argued instead that LDs have specific discourse-managing functions, such as gaining access to the floor in Italian (Duranti & Ochs 1979), and turn-taking and stance-taking in French (Pekarek-Doehler et al. 2015). Finally, interactional studies also found that entirely

detached NPs (with no subsequent clause) have consistent roles in discourse (Ono & Thompson 1994; Helasvuo 2019).

The two studies outlined below initially aimed at studying the function of LD in the interactional perspective in Hebrew and Anal Naga. Yet the process of data collection challenged the assumptions underlying this goal. Natural data reveal an inconsistent classification of parallel phenomena due to the bias of the definition of LD. For example, in all (made up) examples in (10), the speaker starts with a detached (pro)nominal constituent and then continues with a clause.

- (10) a. Mary... she was here.
 - **b.** *Mary... I went to visit John yesterday. He moved here some time ago, you know? So turns out she is his neighbour.*
 - c. She... she was here.
 - d. She... I met her today.

In (10a), the construal is a typical LD. In (10b), following precisely the same start, the speaker proceeds elsewhere and does not refer to Mary immediately. As a result, it would stay outside of the examined sample of LD, although (10a) and (10b) potentially represent the same phenomenon of an initially detached NP. In (10c) the initial constituent is a pronoun, reflecting the active status of the referent in the discourse. The example suggests that NP-detachment is orthogonal to activation. However, (10c) would be disqualified from LDoriented studies as a case of disfluency ("repetition", Fox Tree 1995). Yet if the same start is continued with an oblique reference as in (10d), it could nonetheless be considered a LD-type example. These examples suggest that the study of detached constructions appears to be biased by the original definition of LD. Indeed, studies of natural interactions demonstrate that speakers often have no bird's-eye view of their utterance. They progress through it incrementally as the discourse unfolds, improvising the continuation based on the options that the temporarily achieved construal offers (Auer 2005; Hopper 2011). In this view, all the cases above represent the same phenomenon, as the speaker employs first a detached non-clausal constituent and only then construes the subsequent talk. For covering a broader spectrum of relevant

examples that would more genuinely reflect the discourse processes underlying (9) and (10), the data sample was expanded, up to including the whole of detached NPs/pronouns, irrespective of their continuation.

The two studies outlined below examined "detached NPs", defined as NPs/pronouns that do not form part of a previously initiated clause, and either occupy a separate intonation unit, or occur as the last item in a larger intonation unit. This definition covers cases where the speaker initiates a new structure by uttering a NP (*Mary...*) or by using this NP as a first item in a subordinate clause (*Do you know that Mary...*). The collected examples were coded for their formal properties, prosody, pragmatic status of the referent, evidence for disfluencies, the final construal, and the interlocutors' response.

3.2 Detached NPs in Hebrew

At first sight, LD structures in Hebrew are well-attested and exhibit clear parallels with the analyses of English (Netz & Kuzar 2011). However, the broader picture offered by the examination of detached NPs sheds a different light at the forces responsible for this construal. Excluding vocatives, the examined data consisted of 528 examples of detached NPs, 196 of which evolved into LD.

The most common function among detached NPs (46%) was updating: The NP alone fulfils an asserting speech act and conveys updating information (cf. Ono & Thompson 1994 for English). Speakers can continue the sequence with an additional update in the same regard, hence – retrospectively speaking – producing a LD. Yet this static view distorts the online progression of the talk, which combines two separate assertions, illustrated in (11).

(11) The speaker discusses his trip, pointing at places on the map.

a.	po, jef, f::aʁʃeʁet aʁ-im,	∫e=nik⊮-et	gurvan.saixan.
	here exist chain mountain-pl	that=called- \mathbf{F}	PN
	fe=ze flofet ha-jefejfij-ot b that=it three.of DEF-beauty-PL.F in	<i>e=mongolit.</i> n=Mongolian	
	'Here, there is, a ehm range of m Which means "three beauties" in Mo	10untains, call ongolian.'	ed Gurvan Saikhan.

b. f::alof si-im fel=e::, psag-ot fel=haB-IM ka.ele, three peak-PL of=ehm summit-PL of=mountain-PL like.that

...1176... ze be=e::, 'HIne. it in=ehm presentative

'Th- three peaks of ehm mountain summits, ... it is in ehm, here.'

(OCh_sp1_504-513)

The initial NP produces an update about the discussed referent (*[it's] three peaks of... mountain summits*). Since in such cases, the initial NP constitutes a full updating communicative unit, they are infrequently continued with another updating clause, accounting for 19% of the LD-like examples.

A function of detached NPs that comes closest to the "topicalising" view of LD is found with attention-aligning NPs. In this usage, the speaker seeks to centre the joint attention on a referent as the main goal of their utterance. However, they are not "topicalisations". This usage produces a local effect of an attention shift to a referent, imposing no constraints on the referent role in the ensuing interaction. The follow up action can be a purely physical one, such as jointly examining an item on a map. The effect of the attention-shift lasts indeterminately into subsequent discourse and allows the speaker to refer to the entity whenever and however needed. For example, the speaker in (11) and (12) points at places at the map and names them, ensuring that the interlocutor identifies them in the upcoming talk. However, he rarely uses the referent in the immediately following proposition. Moreover, if the mentioned place is employed in the subsequent talk, it is not necessarily a proposition about this referent. For example, in (12a) the speaker is about to mention a place relevant for his story but struggles with finding it on the map. He finally introduces it in (12b), and refers to it immediately in the follow up clause (12c), but assigns an updating role to it.

- (12) a. *mi::*, *fian*, ...2230... *ui efo*from, Xian ugh where
 - b. *a hine.* LANZHOU. ah PRESENTATIVE Lanzhou

c. lakaχ-nu bakEvet mi=DaTONG le=, ..0.3.. LANZhOU, ... took-1PL train from=Datong to= Lanzhou
 'From, ehm Xian ...2230... ugh where, ah. Here it is. Lanzhou. We took a train from Datong to ..0.3.. Lanzhou, ...' (0ch_sp1_641-647)

An attention-aligning move is justifiable only if the referent is used in the subsequent discourse and hence it is commonly continued into a LD-like structure (82% of attention-aligning NPs). Presumably, it is for this reason that this function became conventionalised in written language. However, it is not a frequent usage of detached NPs (18% of total) and constitutes only around a quarter (24%) of the LD-like examples.

The main share of detached NPs is a product of interactional and production-related factors. The two primary phenomena responsible for nearly a half of LD examples each are recycling (Goodwin 2013) and disfluency (Goodwin 1980). They often co-occur and together account for 66% of the studied LD. Recycling is found when the speaker echoes a chunk of a previous utterance, for returning to an abandoned sequence, accepting a direction proposed by others, or relating their talk to the preceding discourse (Su 2016). When the recycled chunk is a NP, the overall construal fits the definition of LD.

In the case of disfluency, the speaker initiates an utterance, but opts for a different construal, often after a hesitation. Since the original material remains accessible, the speaker can refer to it later. When the initial intonation unit contains a single NP, the overall result is again traditionally regarded as a LD. However, as (13) shows, initial items can be of different kinds, and can be continued with a relevant talk or abandoned.

(13) Discussing coffeemakers:

- **a.** A: ze davas needas. fe=t-eda l-eχa. this thing wonderful that=2sg-know.FUT to-2sg.M
 'It's a wonderful thing. So you know.'
- b. B: ze:: [XX-] thi::s 'This XX'

- c. A: [*ze::*,] thi::s 'This.'
- d. B: *Ima feli*, mother my 'My mother' ...940...
- e. A: [*m*-]-
- **f. B:** [*ani-*]– 1sg 'I'
- **g.** *ma fe=ani jaχol lehaGID l-eχa*, what that=1sG can to.tell to-2sG.M 'What I can tell you'
- h. ze fe=Ima feli::, it that=mother my 'is that my mother'
- bemefeχ, ...0.7... kol fnot χaj-eha, during all years.of life-3sg.F
 'during all her life'
- j. ani χοfev. haja l-a ha-ze fel=SEB
 1sG think was to-3sG.F DEF-this of=SEB
 'I think. She had this one from SEB.'
 (C612_3sp1_028-030; sp2_018-027)

The speakers in (13) compete for the turn, attempting to grab it with the most likely constituents that ensure a range of possible continuations: a pronoun in (13b), (13c) and (13f), a chunk in (13e), a NP in (13d), and a nominalising construction in (13g). Once B secures the turn in (13g) with the "*wh*-cleft" formula (Maschler & Fishman 2020), he recycles the NP *my mother* from (13d) in (13h) and seeks for a suitable continuation. Yet the chosen possessive structure (*she had*) requires an oblique form in Hebrew (*there was to her*). Hence, the speaker refers to it by an oblique pronoun in (13j). While in retrospection it appears as a LD, the overall construal emerged from the fragmented step-by-step advancement: The speaker starts with the most likely constituent (NP unmarked for case) which allows a broad range of potential continuations. He then proceeds according to the local needs and limitations of turn-competition, which trigger a disfluent, incremental construal.

Remarkably, LD was related in previous research to turn-competition, turn-taking by non-dominant speakers, and emotive discourse (Duranti & Ochs 1979; Netz & Kuzar 2007; Pekarek-Doehler et al. 2015). In these settings, utterance planning is impeded, and the discourse is characterised by fragmentation and frequent recycling. Restricting the data sample to examples where the initial chunk is a lexical NP, and the continuation is a clause produces the impression that LD is a structure used for these purposes. However, the initial, often recycled fragments attested in these circumstances can equally be pronouns, chunks, particles, and many other item types as (13) demonstrates. These examples are overlooked in LD-oriented studies, while combinations (13i) that reflect the same phenomenon are selected as valid LD examples.

To summarise, apparent LD structures in Hebrew can be analysed by wellknown discourse factors, shown in Table 3. The initial part performs a local interaction-managing move. If the initial part is continued, the subsequent material is interpreted as relevant to it for essentially pragmatic reasons (Sperber & Wilson 1996). When the initial part is a referential NP, the outcome of relevance is an apparent "aboutness" interpretation.

It can be seen how relying on pre-assumed categories can mislead a corpus-based study. An analysis based exclusively on tokens of LD, namely detached lexical NP plus clause, appears to suggest that it is a special construction used for introducing a referent and talking about it separately. Yet this is an artifact of the chosen data sample: Lexical NPs typically introduce referents of low accessibility (Ariel 1990), while clauses communicate propositions. In addition, adjacent material typically exhibits relevance relations. This set of contributions of separate factors accounts for the aboutness-like "topical" interpretation associated with an initial lexical NP.

local contribution of detached NPs	contribution of continuation	% of de- tached NPs	% of left dislocations
re-use previous material		30	49
start with the most likely constituent*	proceed with the talk, be relevant to the previous material	27	48
align attention		18	24
update / convey stance		46	19

Table 3Summary of detached NPs in Hebrew. The sample contains 528 detached
NPs and 196 left dislocations.

(* mostly bare (pro)noun referring to an accessible referent)

Once the data sample is expanded to different kinds of detached NPs and includes all cases irrespective of their continuation, it turns out that only 34% of the initial slots in the examined LD-like cases introduce a referent used in the follow up talk. The detachment of the NP turns out to be orthogonal to the activation status: In 52% of the examples this slot contains given material, often a pronoun (26%). Thus, a study originally conceived as exploring the function of LD cast instead doubts on the view that LD is a syntactic structure at all. Avoiding a pre-assumed restrictive definition and expanding the sample to a family of related phenomena resulted in recasting the presumable concepts of LD and topicality as by-products of other discourse factors.

3.3 Detached NPs in Anal Naga

The findings for Anal Naga replicate the conclusion above, namely that LD is not a construction but a usage of a detached NP that happens to be continued with a clause. However, the properties of detached NPs in Anal Naga differ from those in Hebrew, apparently due to the syntactic profile of the language. Additionally, the availability of video data in the corpus allows tracing interactional and multimodal factors that affect the syntactic construal.

The study is based on 195 examples. Detached NPs are defined here again as NPs that initiate a new syntactic construal and either occupy their own intonation unit, or occur as the last constituent of an intonation unit. In the



Figure 7 Example (14) – referent activation by non-detached clause initial NPs.

case of Anal Naga, the syntactic part of the definition encompasses bare NPs, as no relation between them can be established before the delivery of the clause-final verb. It also includes the first NP marked for case (ergative or absolutive) in a larger clause, if this occupies a separate intonation unit.

Anal Naga is a verb-final language with limited expression of accessible material. Consequently, clauses recurrently start with bare verbs or with an introduction of new referents by lexical NPs. In (14), the utterance contains two clauses. The first constituent in each clause is a NP introducing a

discourse-new exophoric referent.

(14) The speaker observes people butchering a porcupine and gives advice.

 va-é-e
 he-vál-dó:=o
 a-kú:
 va-bôl-t^hùŋ=e.

 3-dung-DEM2
 HORZ-throw-away=voc
 2-hand
 3-dirty-while=voc

 'Throw its dung away while your hand is dirty.' (Figure 7)
 (anm_20161210_phiran_khullen_porcupine_2 3'10'')

Starting with a discourse-new referent, such as its dung in (14), is not by itself problematic. This utterance smoothly unfolds with no hesitation. However, if the speaker were to pause after the first NP, the outcome would be a separation of the pre-verbal referent-introducing constituent into a detached NP (e.g. Its dung... throw (it) away). This is a common pattern indeed: 73% of detached NPs in the data refer to new or semi-active entities. Remarkably, the first NP in many such cases introduces an argument that would constitute a canonical case of focus in traditional views of information structure. Yet in a verb-final language it necessarily precedes the verb. Hence its detachment would result in its production, negotiation, and attention-centring around the referent before the final verb. As a result, apparent LDs in verb-final languages crosscut the traditional distinction of topic and focus. The same entity is used as a negotiated centre of joint attention before the production of the verb (as if it were "topicalised") but conveys the primary message, as if it were the focus (Ozerov 2015, 2021a: 9). This can be seen in (15c) below, aligned with the figures above: The speaker describes a beehive, saying 'it was built on top of a tree trunk'. However, he first introduces the trunk in a separate intonation unit, accompanying the speech by a depicting gesture (Figure 9 centre). The primary constituent of the message is introduced and negotiated at the beginning of the utterance.



Figure 8 Example (15b) – gradual multimodal achievement of joint attention at a referent.



Figure 9 Example (15c) – discourse following the attention alignment in Figure 8.

- (15) The speaker starts telling how he and his friends were attacked by wild bees.a. A: 'There was a beehive hanging like that.'
 - b. ka-p--[Fig. 8 left] ka-pú-PN [centre] pa- pastor-he-tũ: [right]
 1-un1-uncle-PN pa- pastor-DEM1-ERG
 'My unc- my uncle PN the pa- pastor'
 - c. ...670... [Fig. 9 left] va-ból-to, va`:ka:l-lé:n [centre] i-l^hà-vá=tô [right]
 3-trunk-ABS above-top NMLZ-built-COP=DM
 'the tree trunk, it was built in the upper part, eh?'
 - **d. Others:** [*m:*] mhm
 - e. A: [so]ral-t^hìŋ-lé:n-lu.e i-t^hà-vá=ve tree.type-tree-top-kind NMLZ-build-COP=DIR 'it was built on the top of a Soral tree,'

f.

...2050... va-t^hí-nól-má-vá 3-see-AUG-NEG-N.FUT 'he didn't see it.' (anm_20161210_phiran_khullen_gathering_outside_1 5'05')

Example (15) also offers a good illustration of attention alignment by a detached NP, that constitutes a separate discourse move. This is the case in (15c) with a depicting gesture, but is even more evident in (15b). The speaker repeatedly hesitates at the beginning of the initial NP 'my uncle the pastor', yet the multimodal aspects of the interaction shed light on this issue. Introductions of a new discourse referent from the community are often accompanied by a pointing gesture at the house of the introduced person. The speaker starts introducing his uncle with no pointing gesture (Figure 8 left). He restarts and produces the NP with a minor handwave towards the person's house (Figure 8 centre, green dashed arrow), without shifting his gaze (red arrow). Then he restarts again and performs a precise prolonged finger- and gaze-pointing (Figure 8 right), while providing more information about the person. Following this multi-stepped multimodally articulated introduction, he returns to the basic posture and pauses. The goal of this unit is an achievement of joint attention at a newly introduced referent. Thanks to this move, the speaker can use the referent later whenever and however needed. However, as the repeatedly modified subsequent construal show, the follow up talk has not been planned yet at this stage. After a long pause, the speaker talks about the beehive and not about his uncle. He first refers to the uncle again eight second later, after two full sentences about the tree, two pauses, recurrent modifications, and back-channelling. Nonetheless, thanks to the separate, multimodal act of centring attention, a mere third-singular indexing on the verb suffices for this goal. The relevance of separately introduced referents lasts indeterminately into the subsequent discourse and has no proposition-level topical status.

In addition to introducing new referents, a primary property of detached NPs is disfluent production found in 71% of cases. However, as is already illustrated by (15b), video-data provides an opportunity for a fine-grained analysis of this phenomenon. Rather than representing a unified case of production problems, it appears as an array of factors that prompt an incremental



Figure 10 Example (16) – recipient search triggering construction shift.

utterance construal. A salient reason for partitioning the utterance into smaller chunks is rooted in the recipients' co-participation. For example, it was shown for English that a failure to obtain a gaze from the recipient makes the speaker restart (Goodwin 1980). In the case of multiple recipients, a transition between primary addressees can trigger a new construal, leaving behind a detached constituent. For instance, (16) would be considered a classic case of a hanging topic, while the audio would suggest that it is a hesitation. However, Figure 10 above aligned with the transcription reveal the dynamics of the interaction along this construal. The speaker is on the right.

- (16) The speaker claims that cows and gayals (*Bos frontalis*) cannot graze in the same area because of different body odour.
 - a. 'They released the cows, and as they come up to look after them.'
 - b. *panam=tũ::*∧∖_[Fig. 10 left] tcar^hìm-he_[centre] smell=ERG gayal-DEM1

i-dèn-dó:-vá [*right*] *ka.da.va* NMLZ-disappear-away-N.FUT DM 'The smell – the gayal disappeared, you know.' (anm_20160917_LamphouPasna_Thotson_teashop 2'19'')

Delivering the initial NP, the speaker gazes at the addressee at the back of the image. Yet this addressee does not return gaze and fails to back-channel at the confirmation-requesting rise-fall intonation (Figure 10 left). Hence, after

local contribution of detached NPs	contribution of continuation	% of de- tached NPs	% of left dislocations
start with recycled/given material	proceed with the talk	30	39
start with the main goal (new referent)		34	44
align attention		32	42
interactional turn management		28	36
update		9	2

Table 4Summary of detached NPs in Anal Naga. The sample contains 195 detached
NPs and 150 left dislocations.

the initial NP, the speaker initiates a gaze search for a new recipient. He first turns to his left, passing over the listener in front of him, although this gazes at him throughout the talk (Figure 10 centre). The speaker then stops the search and returns the gaze to this already involved listener towards the end of the clause (Figure 10 right). In the end of the utterance, the new recipient acknowledges his newly acquired status nodding.

The NP did not specify the topic for the subsequent clause, nor was the clause produced as "about the initial referent". The NP initiated the talk with one listener as the primary addressee. The subsequent clause initiated a new action, as the speaker started searching for a new listener. Yet this new action took advantage of the available resources, including the accessibility of the information contributed by the immediately preceding NP.

To summarise, there is a broad range of factors that can prompt speakers to resort to a detached NP, shown in Table 4. These findings reveal how interlocutors orient themselves at a range of diverse factors, keeping track of previously introduced referents and speaker's actions. The apparent LD construction is a discourse collocation of detached NPs with a subsequent clause.

3.4 Left Dislocation?

Both case studies of detached NPs for Hebrew and Anal Naga demonstrated that LD is not a planned binominal clause structure with a coherent information structural function. The studies identify instead a broad array of finegrained concepts that underlie the apparent LD-construal and its topicality effects, allowing for a finer analysis and comparison.

The continuation of a detached NP by a clausal structure is much more frequent in Anal Naga. This is partially an outcome of the common usage of detached NPs as single-standing updates in Hebrew (42%), which is rare in Anal Naga (9%). In both languages, speakers rely on reusing recently mentioned material to initiate an utterance (30%). As a verb-final language with a limited expression of accessible material, Anal Naga also exhibits the opposite phenomenon that contributes a larger share to overall LD-like outcome: speakers start by introducing highly informative material, immediately pausing and possibly negotiating it with the addressee. Potentially for this reason, disfluencies are also much more common in Anal Naga. New referents in Anal Naga are more frequently negotiated with interlocutors (18% in Anal Naga, 3% in Hebrew), revealing distinct interactional practices.

Hence, examining a collection of instances of the NP plus clause construal for both languages and applying the available categories of "left dislocation" and "topicality" could suggest that these are indeed universal factors corroborated by the data from the two very different languages. However, an expansion of the study to the whole of detached NPs/pronouns and the step-by-step examination of the interactional unfolding of the utterance reveals a range of diverse, mostly interactional factors, that trigger the usage of detached NPs. It also sheds light on information structural effects of "topicality" that may arise as by-products of these usages, where a mention of a referent is continued with a relevant material (Matić & Wedgwood 2013; Ozerov 2021a). The original research topic (the function of LD) turns out to be misguided by taking the studied concept for granted.

4 Conclusion

An ever-troubling question in cross-linguistic research is whether the observed similarities and discovered generalisations are by-products of the theoretical framework. This paper shows that research on corpora of natural interaction can be harnessed for exploring the nature of presumably basic theoretical notions and for their decomposition into fine-grained primitive concepts, simultaneously with the language-specific study of the examined phenomena. It outlines the findings of four studies dealing with two commonly accepted phenomena in two unrelated and typologically dissimilar languages: interrogatives and left dislocations, in Hebrew and Anal Naga. Taking such concepts as interrogatives, questions, left dislocation, and topicality for granted would indeed corroborate the available theoretical models. Yet with no restrictive pre-assumed definitions of the studied concepts, a broader examination of transitional and only partially related examples leads to the decomposition of the assumed concepts into a fine-grained view of interactional moves performed by the interlocutors for achieving local communicative goals.

Comparing these studies, and ultimately situating them in a broader typological perspective can ultimately advance our understanding of the factors that underlie communication and shape linguistic structures. For example, the commonality of the rising contour in information requests lead to promising hypotheses regarding its ethologically and biologically motivated origins. According to the frequency code proposal, the high pitch originates in the indexing of the small size of the speaker, thus conveying submission or a lack of authority, and therefore a lack of assertion and a request for assistance (Ohala 1984; Gussenhoven 2004: 82). Clearly, though, this proposal does not account for the breadth of language-specific and sociolinguistic facts, nor does it apply universally. From the language-internal perspective, the prosody associated with information requests is typically found also in other utterance types. Moreover, the actual prosody of information requests exhibits variability beyond the prototypical contour and depends on multiple social and pragmatic factors (Kohler 2004; Couper-Kuhlen 2012). Cross-linguistically, there are deviations from the high-pitch tendency, such as West African languages where the question prosody is characterised by low pitch and breathy voice (Rialland 2009). Finally, the social action of requesting information does not necessarily align with submission and help seeking but is rather a cover term for a broad range of actions (Stivers & Rossano 2010), some of which can represent dominance or aggression.

Decomposing the concepts of question (for the action) and interrogative (for its expression) into smaller constituents opens the way for a more finegrained analysis and explanation. In the proposed view, question-like utterances are variable sets of diverse discourse moves where speakers display ignorance and interest in information, draw attention, solicit responsive action, request assistance, impose their will, express attitude towards their lack of knowledge, claim and negotiate authority, and more. Language-specific markers convey concepts that correspond to these fine-grained interactional notions. This approach allows to analyse the variability of language-specific marking in request-like utterances and the different functions of apparent interrogative structures. It also allows to identify the cross-linguistically common underlying factors that shape the observed marking. For instance, in the Western African language Ikaan there is a large set of prosodic markers associated with information requests: deviant pitch trajectories, voice quality, vowel lengthening, increased intensity, and more (Salffner 2017). Salffner links these markers to various ethological factors, and in particular attention drawing, expression of attitude and appeal for collaboration. Natural attention-drawing (but not the other factors found for Ikaan) underlies also the final rise-fall in Anal Naga (Ozerov 2021b). Instead of opting for a single external factor responsible for the overarching concept of an information request, such studies operate with different prosodic markers linked to a variety of external factors. Follow-up studies of other languages can reveal the similarities and differences of moves involved in parallel tasks, and the systematicity of the factors that play a role in performing each move. In a similar way, the analysis of apparent left dislocation in Hebrew and Anal Naga disentangles the pre-empirical notion of topicality revealing how dynamic modification of the unfolding utterance, recycling and resonance help to achieve tasks related to referent introduction, establishment of relevance and linkage in discourse, addressee selection, turn-competition, and more (cf. Ozerov 2021a).

Hence, a corpus study of a pre-assumed research topic is inseparable from the study of whether it is a research topic at all. Replacing the study of pre-assumed overarching concepts with the fine-grained exploration of interaction results in refined cross-linguistic comparisons, that offer new interactionally-informed perspectives on the cross-linguistic analysis and explanation of linguistic facts.

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