IGDAL 2

International Graduate Students
Conference for Diverse Approaches
to Linguistics

October 15, 2012
Tel-Aviv University
Webb building room 001
Program

9:00-9:45  Reception

9:45-10:15  GREETINGS
The Organizing Committee
Prof. Outi Bat-El, Head of the Linguistics department

10:15-11:15  INVITED SPEAKER
Dr. Roni Katzir, Tel-Aviv University
Logical operators in natural language

11:15-11:30  Coffee break

11:30-12:50  SESSION 1
Chair: Micky Daniels, Bar-Ilan University

Tali Arad, Tel-Aviv University
The mental representation of the transitive-unaccusative alternation: a psycholinguistic study
Beate Bergmann, Humboldt University Berlin, Germany
From empiricism to theory - a syntax approach to German beim-progressive

12:50-14:20  Lunch break

14:20-15:40  SESSION 2
Chair: Matan Goldblatt, The Hebrew University of Jerusalem

Liubov Baladzhaeva, University of Haifa
First language attrition among Russian-speaking immigrants in Israel:
The effect of Hebrew proficiency
Lyle Lustigman, Tel-Aviv University
The Role of Non-finite Verb Forms in Early Hebrew Grammar
15:40-16:40  **POSTER SESSION**

**Lavi Wolf**, Ben-Gurion University of the Negev and **Ilona Spector Shirtz**, The Hebrew University of Jerusalem

*A-Reconstruction Puzzles from an Expressive-Descriptive Perspective*

**Micky Daniels**, Bar-Ilan University

*The Hebrew Lix’ora – Trimming the Hedge*

**Hadas Yeverechyahu**, Tel-Aviv University

*OCP in Modern Hebrew Verbs - an Empirical View*

**Aviad Albert** and **Hadas Zaidenberg**, Tel-Aviv University

*Filler Syllables in the Acquisition of Hebrew: A Prosodic Account*

**Gal Belsitzman**, Tel-Aviv University

*Investigating reduplication in Israeli Sign Language - a pilot study*

16:40-18:00  **SESSION 3**

Chair: **Rotem Gonda**, Ben-Gurion University of the Negev

**Lavi Wolf**, Ben-Gurion University of the Negev

*Expressing and Describing Modality*

**Carl Börstell**, University of Haifa

*Revisiting Reduplication: Toward a description of reduplication in predicative signs in Swedish Sign Language*

**The organizing committee:** Chen Gafni

Dganit Kim

Shaul Lev

Hadass Zaidenberg

* We would like to thank Outi Bat-El, Tal Siloni, Nirit Kadmon, Tal Oded, Dolly Goldenberg and Noa Karni for the help with the organization of the conference, to Hadas Yeverechyahu and Hadar Sabo for the graphic designing, to the anonymous reviewers for the abstract evaluation and to The Shirley and Leslie Porter School of Cultural Studies for providing the funding.
The mental representation of the transitive-unaccusative alternation: a psycholinguistic study

Tali Arad
Tel-Aviv University

Goal and Predictions.

It is widely agreed in the linguistic literature that there is a systematic relation between the members of the transitive-unaccusative alternation; i.e., that some linguistic rule or process governs the relation between the transitive verb and its unaccusative counterpart. However, there is no consensus regarding the nature of this relation. According to some theories, one verb is derived from the other (the unaccusative from the transitive – e.g., Chierchia 2004, Levin & Rappaport-Hovav 1995, Reinhart 2002, or the transitive from the unaccusative - e.g., Harley 2008, Pesetsky 1995, Ramchand 2011, Rappaport-Hovav & Levin 2012), whereas according to others, the two verbs are not derived from one another, but are independently derived from a common root (e.g., Arad 2005, Doron 2003, Pykkänen 2008). In order to shed light on this controversy, I conducted a psycholinguistic experiment comparing the relation between transitive-unaccusative pairs to the relation between pairs of verbs in two other groups: transitive-reflexive pairs and pairs of verbs that share a common consonantal root, but not a thematic concept (henceforth, 'common-root' pairs/verbs).

It is widely agreed that reflexive and transitive verbs are directly derivationally related: the reflexive verb is assumed to be derived from its transitive counterpart (e.g., Arad 2005, Reinhart & Siloni 2005). In contrast, 'common-root' verbs are assumed to be independently derived from a common root and not from one another (e.g., Arad 2005). Thus, these two groups constitute a fine context to investigate the relation between members of the transitive-unaccusative alternation. Based on previous work showing that the reaction time for a lexical decision task is shortened when a word is presented following a related word (e.g., Allen and Badecker 2002b, Boudelaa and Marslen-Wilson 2000, Marslen-Wilson et al. 1994), it is expected that the relation between the items in the three groups would be reflected in the reaction time for a lexical decision task upon presentation of a pair member following its mate. My predictions were as follows:

- If transitive and unaccusative verbs are derived from one another, the reaction time to the target they exhibit in a lexical decision task would be similar to the reaction time found in the transitive-reflexive group.
- If transitive and unaccusative verbs are derived from a common root, independently of one another, the reaction time to the target they exhibit in a lexical decision task would be similar to the reaction time found in the 'common-root' group.
Method.
I conducted a reaction time experiment on 34 participants using a cross-modal priming paradigm. 54 prime-target pairs of verbs which were controlled for frequency, morphological complexity and root transparency were used in three experimental conditions: transitive-reflexive, transitive-unaccusative and 'common-root'. In addition, 54 filler pairs in which the target was a non-word and 9 pairs in which the target did not share a root with the prime were added. In each trial, participants heard an auditory prime verb followed by a visually presented verb (ISI = 740ms) serving as target of a lexical decision task: participants had to decide as quickly as possible whether or not the target verb was an actual word in Hebrew. Reaction times to the target verbs were measured. Examples of primes and targets are presented in the table below. The common consonants of the root are bold.

<table>
<thead>
<tr>
<th>prime (auditory)</th>
<th>transitive-reflexive</th>
<th>transitive-unaccusative</th>
<th>common root</th>
</tr>
</thead>
<tbody>
<tr>
<td>raxec ('washed')</td>
<td>רוחט ('washed')</td>
<td>perek ('disassembled'-TRANS)</td>
<td>xišev ('calculated')</td>
</tr>
<tr>
<td>target (visual)</td>
<td>hitraxec ('washed himself')</td>
<td>hitparek ('disassembled'-UNACC)</td>
<td>hixšiv ('considered')</td>
</tr>
</tbody>
</table>

Results.
Repeated Measures ANOVA revealed that mean reaction time differed significantly between the three conditions ($F(2, 66)=47.728, p<0.001$). Post-hoc pairwise comparisons showed that reaction times for unaccusative verbs presented following their transitive counterparts were significantly shorter than reaction times for verbs presented following common-root verbs ($M_{transitive-unaccusative}=759ms; M_{common-root}=839ms, p<0.001$). In addition, reaction times for reflexive verbs presented following their transitive counterparts were significantly shorter than reaction times for verbs presented following common-root verbs ($M_{transitive-reflexive}=750ms, p<0.001$). Importantly, reaction times did not differ statistically between the transitive-reflexive condition and the transitive-unaccusative condition.

Discussion.
The results indicate that the relation between transitives and unaccusatives is indeed different from the relation between common-root verbs, and similar to the relation between transitives and reflexives. The findings are consistent with the claim that transitives and unaccusatives are directly derivationally related. A possible objection might be that a difference in semantic relatedness underlies the results. That is, it might be argued that the difference between the common-root group and the two other groups is due to the fact that the semantic relation between verbs in the common-root group is weaker than the semantic relation between verbs in the two other groups. However, previous experimental results from Modern Standard Arabic (Boudelaa & Marslen-Wilson 2000) suggest that the effect found here is indeed owing to a derivational relation, not a semantic one. In that study, no differences in reaction times were observed between semantically related noun pairs vs. semantically unrelated
pairs sharing a consonantal root. Importantly, the semantically related nouns were nominalizations of verbs that share a thematic concept. Assuming that these nominalizations (in Arabic) are not derived from one another but rather from their corresponding verbs (e.g., Siloni 1997, Siloni & Preminger 2009), the fact that a difference was found in the present study but not in Boudelaa & Marslen-Wilson's study is expected, and supports the claim that a derivational difference, not a semantic one, underlies the current results. The study raises interesting questions regarding the relation between words of different categories (N, V, A, etc.), and paves the way for additional experiments that would investigate these questions.

Selected References


From empiricism to theory - a syntax approach to German beim-progressive

Beate Bergmann
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Former corpus studies on the non-progressive language German assume that beim-progressives including a non-incorporated complement are ungrammatical, whereas incorporated complements are grammatical [1] [2]. More precisely, both am- and beim-prepositional structures usually do not occur with non-incorporated direct objects in the data [3]. Considering previous corpus studies, also non-incorporated prepositional phrases as additional constituents were rarely found, and only as adjunction in case of am-progressives [1]. Assertions regarding ungrammaticality are based on the assumption that non-incorporated complements are realized in a syntactical position before or within the PROG-phrase (1), i.e. as a complement. Hence, the non-incorporated constituent intervenes the PROG-phrase as a complement, which leads to ungrammaticality. This effect has already been shown for am-progressive in literature [2].

In a combined self-paced reading and acceptability rating study (n=39), it was investigated, whether the non-existence of a structure in a corpus is evidence for its ungrammaticality by comparing prepositional am- and beim-progressive structures (based on the assumption that the former can replace the latter [4]) with incorporated and non-incorporated constituents. In contrast to previous assumptions it was tested whether non-incorporated constituents are acceptable when realized as adjunct. (2) exemplifies an experimental item for beim-and am-constructions consisting of an incorporated nominal phrase (iNP) (2a), a non-incorporated nominal phrase (nNP) (2b), or a non-incorporated prepositional phrase (nPP) (2c). To avoid any intervening elements within the PROG-phrase, items of type nNP and nPP comprised a subject, the auxiliary sein (‘to be’), the PROG-phrase and a right-adjacent constituent [5], respectively.

The results showed that beim-progressive forms (in comparison to am-progressive forms) are significantly more accepted (t= 2.81) across all investigated complement types and irrespective of incorporation. Furthermore, mean rating values for both progressives with nPP (M_am = 4.12/ 7; M_beim=4.80/ 7) showed a significantly higher acceptability for beim-progressive (t= 2.11), which is in contrast to former observations [3]. Whereas mean rating values for iNP tend to be slightly higher for beim-than for the respective am-structures (M_am= 5.12 / 7; M_beim= 5.49/ 7), a marginal significant effect (t= 1.78) is revealed for beim-progressive including nNP (M_am = 4.98/ 7; M_beim=5.33/ 7).

Assuming further that longer total reading times indicate higher difficulties in processing (e.g., caused by ungrammatical structures), the current data do not verify differences in processing difficulties for both progressive types.

In sum, the current results suggest that beim-progressives are regardless of its complement type in the first place grammatical structures in German, despite their rare occurrence or even lack in various
corpora. Worth mentioning is that prepositional progressives in German are generally rare structures, and mainly used in spoken informal speech. Although the corpora of previous research [1] consisted of spoken speech data, they were mainly formal (e.g., talks between doctor and patient), which might explain the low frequency even of iNP-constructions. Concerning previous investigations, the observed violations of grammaticality caused by an external complement might arise from the assumed underlying syntactical structure of the PROG-phrase. Realizing the non-incorporated constituent in a hierarchical lower position than the PROG-phrase can capture this issue, what is empirically reinforced by the results of the present study. Conclusively, the current study proved that *beim*-progressive with a non-incorporated complement realized as adjunct in the post-PROG position is an acceptable structure in German. This strengthens the research approach that there is no caused correlation of frequency and grammaticality, and thus, acceptability in grammatical terms cannot be predicted sufficiently based on frequency in a corpus.

1. *[IP [Paul ist die Zeitung [PROG beim Lesen]].
   Paul is the newspaper BEIM reading
   'Paul is reading the newspaper.'

2. a. Paul ist am/ beim Zeitunglesen.
   Paul is AM/ BEIM newspaper-reading.
   'Paul is reading the newspaper.'
   b. Paul ist am/ beim Lesen der Zeitung.
   Paul is AM/ BEIM reading the newspaper
   'Paul is reading the newspaper.'
   c. Paul ist heute Abend am/ beim Aushelfen in der Kneipe,
   Paul is today evening AM/ BEIM helping-out in the pub
   'Paul is helping out at the pub this evening.'

References

First language attrition among Russian-speaking immigrants in Israel: The effect of Hebrew proficiency

Liubov Baladzhaeva
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Research on first language (L1) attrition in late bilinguals is a relatively new, but fast-growing area. Most often L1 attrition is explained as a result of the influence of the second language, insufficient maintenance of L1, length of residence in the second language environment, and the age at which second language acquisition starts (Altenberg & Vago, 2004; Schmid, 2007, 2011; Gurel, 2008; Pavlenko, 2010). Empirical evidence suggests that even a very limited knowledge of L2 may result in some attrition of L1 in an L2 environment (Yagmur et al., 1999). However, research on attriters with limited L2 knowledge is scarce, and there is no research whatsoever on whether attrition is possible in immigrants with no knowledge of L2. The aim of my study was to find out whether Russian immigrants in Israel with little or no knowledge of Hebrew experienced attrition of Russian.

Sixteen immigrants with no knowledge of Hebrew were compared to 44 immigrants with knowledge of Hebrew, and to 21 monolingual residents of Russia and Kazakhstan, who served as a control group. Participants of the three groups were matched on gender and educational background. The sociolinguistic information about the immigrants was collected by means of a questionnaire. Three instruments of measurement were designed: an elicitation task of target frequent lexical items, a grammaticality judgment test that required the participants to recognize errors in collocations and correct them, and finally, a grammaticality judgment test of errors in complex grammatical constructions and their correction.

The data showed that, on the lexical task and the grammaticality of collocations test, the Russian-speaking immigrants with no knowledge of Hebrew performed no differently than the immigrants with knowledge of Hebrew. Both groups of immigrants achieved significantly worse results than the control group. However, on the grammaticality of complex grammatical constructions, the immigrants without knowledge of Hebrew performed even worse than immigrants with knowledge of Hebrew and controls.

Correlations between tests results and some sociolinguistic variables showed that the results of judgment of complex constructions correlated moderately and significantly with the level of Hebrew knowledge and with the amount of usage of Hebrew.

On the basis of the results, we can conclude that immigrants with no knowledge of L2 (Hebrew) can experience attrition of L1 (Russian) similarly to or worse than immigrants with knowledge of Hebrew. Paradoxically, higher L2 proficiency and frequent usage of L2 may have a positive effect on the maintenance of L1. The results are related to the notions of exposure to attrited input, and the importance of metalinguistic awareness in the process of attrition.
References


The Role of Non-finite Verb Forms in Early Hebrew Grammar

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The paper examines the gradual development of morphological specification in early acquisition of Hebrew, as reflected in young children’s use of non-finite verb forms. Non-finite verbs, in the sense of forms not explicitly marked for Tense and/or Aspect, have been shown to figure widely in children’s early verb usage in different languages (e.g., Blom & Wijnen, 2000 – in Dutch, Hyams, 1986 – in English, and Rizzi, 1993/1994 – in Italian). Different explanations have been offered for children’s use of uninflected verbs in matrix clauses: as reflecting reliance on Root or Optional Infinitives in generative analyses (e.g., Haegeman, 1995; Hoover, Storkel, & Rice, 2012; Hyams, 2012; Wexler, 1993), or as demonstrating the generally stepwise path of acquisition in developmentally oriented approaches in a range of languages (e.g., Dressler & Karpf, 1995; Dressler, Kilani-Schoch, & Klampfer, 2003; Gathercole, Sebastián & Soto, 2002, Pizzuto & Caselli, 1994; Theakston & Lieven, 2008; Wittek & Tomasello, 2002).

Hebrew is an interesting case for this issues, since it lacks a single unequivocal “base” form of verbs (unlike English talk, sleep), and its infinitival form is marked by a non-stressed prefix, making it a less obvious candidate for initial verb production. Hebrew-acquiring children's early verbs have been shown to typically take the form of “bare stems” (Adam & Bat-El, 2008; Armon-Lotem & Berman, 2003; Berman & Armon-Lotem, 1996; Lustigman, 2012). These include non-affixed Past or Present Tense forms (e.g., haláx ‘went’ or boxé ‘is-crying’) as well as truncated forms that can be interpreted either as Infinitives (e.g., šon, tôax – corresponding to the Infinitivals lišón ‘to-sleep’, lifôax ‘to-open’, respectively), or are ambiguous between various target forms (e.g., tapés can stand for letapés ‘to-climb’, metapés ‘climbs’ yetapés ‘will-climb’ and other inflected forms in the paradigm).

The present study analyzes early verb forms from longitudinal samples of three Hebrew-acquiring children (mean age-range 1;4 – 2;2) in relation to the level of productivity of verb-affixation. Analysis revealed two main developmental phases: Initially, before they begin to master verb inflections productively, instead of using infinitival forms, Hebrew-acquiring children rely, for several months, on non-affixed “bare stems”. At the next phase, prefix-marked “full” infinitives occur – typically in well-formed syntactic contexts – along with productive use of affixed Present-tense (benoni) participial forms. Hebrew-acquiring children thus appear to make selective use of different types of non-finite forms (initial bare stems followed by Infinitives and benoni), each representing different levels of inflectional knowledge. The analysis further shows that children shift from syntagmatic reliance on non-finite forms in combining elements of simple clauses to paradigmatically constrained environments by use of inflectional alternations. To account for these findings, it is argued that non-finiteness in early child language is itself a developmental concept that can be
characterized in terms of several sub-phases, each of which demonstrates a particular level of linguistic knowledge, determined largely by typological features of the ambient language.

References


The goal of this paper is to shed new light on A-movement reconstruction, i.e. the phenomenon in which an A-moved quantifier can scope both in its raised and base positions (cf. May, 1977):

(1) Some politician is likely to address John's constituency. $\exists >> \text{likely/likely} >> \exists$

While (1) supports the view that reconstruction in A-movement is possible (cf. Wurmbrand & Bobaljik, 1999), there are counterexamples which support the opposite view (Lasnik, 1998):

(2) a. No one is certain to solve the problem. $\neg \exists >> \text{certain} / *\text{certain} >> \neg \exists$

b. Every building is 10% likely to collapse. $\forall >> 10\% \text{likely} / *10\%\text{likely} >> \forall$

Clearly both views can't be correct at the same time. Thus our point of departure will be the intermediate view of Iatridou & Sichel (2011) (henceforth I&S), according to whom A-reconstruction is possible unless the DP is modified by negation (i.e. NegDP), thereby explaining cases such as (2.a). We agree with I&S, but wish to add another factor to the equation, one that lies at the syntax-semantics interface and focuses on the raising predicate (e.g. modal) rather than the quantifier. Initial evidence for the effect of the raising predicate comes from I&S:

(3) No one seems to solve the problem. $*\neg \exists >> \text{seem} / \text{seem} >> \neg \exists$

(3) contrasts with (2.a) with regards to the scope of the quantifier. I&S claim that the difference arises from replacing certain with the Neg-raising seem. A Neg-raising predicate scopes above negation, as can be seen in (4.b):

(4) a. It is not certain that he will win $\neq$ it is certain that he will lose. b.

It does not seem that he will win $=$ it seems that he will lose.

I&S's syntactic claim interestingly coincides with a semantic one. Both seem and certain convey belief and are thus semantically represented by epistemic modals, but each stands for a different type of epistemic modality. Following Lyons (1977), we propose a distinction between subjective and objective epistemic modals, and add that the former are used expressively, conveying the degree of belief of the speaker with regards to the asserted proposition, and reside in a syntactically high position, specifically higher than sentential negation, which explains their Neg-raising property. The latter are used descriptively as part of the proposition and are positioned lower. An indication for the high position of seem is found in cases of interaction with focused material:

(5) a. JOHN seems to be winner material, not Mary. Foc >> seem/ seem >> Foc

b. JOHN is certain to be winner material, not Mary. Foc >> certain/ *certain >> Foc c.
JOHN is certainly winner material, not Mary. Foc >> certainly/ certainly >> Foc

*Seem* can have scope over the focused JOHN, resulting in a contrastive interpretation for (5.a), while this interpretation is not available for *certain*. Following Rizzi (1997), we take JOHN to be located in the left periphery in FocP, and *seem* to be located in ForceP:

(6) \[CP \text{ ForceP} >> \text{ TopP} >> \text{ FocP} >> \text{ TopP} >> \text{ FinP} >> [TP \ldots] \]

We argue that the reason for *certain* not to have an expressive reading is that the modal adverb variant *certainly* already fulfils this role, and indeed the modal adverb is able to scope over the focused element (5.c).

More evidence for the existence of different syntactic positions for epistemic modals comes from the connection between the two types of modality and their scope over quantifiers in various languages. English, for example, is a language in which epistemic modality is primarily (but not always) interpreted expressively.

Thus, the modal has wide scope resulting in (7) being contradictory (cf. von Fintel & Iatridou, 2003):

(7) #Every student may have left but not every one of them has. \(\Diamond \gg \forall\) (inconsistent)

Dutch, on the other hand, is a language in which epistemic modality is primarily interpreted descriptively (cf. Huitink, 2008) and indeed the modal has narrow scope and (8) is not contradictory:

(8) a. Iedere student kan vertrokken zijn, maar niet iedere student is vertrokken. \(\forall \gg \Diamond\)  
   (consistent)

   Every student may left be but not every student be left.

Interestingly, Chinese has a particle *dou* which marks the scope of a given QP. This particle interacts with epistemic modals in a manner that nicely parallels the evidence from English and Dutch, i.e. expressive modals (9.a) have wide scope and descriptive modals (9.b) have narrow (cf. Lin, 2012):

(9) a. Mei-ge xuesheng keneng *dou* likai-le.

   Every student may DOU leave. \(\Diamond \gg \forall\)

b. Mei-ge xuesheng *dou* keneng likai-le. \(\forall \gg \Diamond\)

There are two possible theoretical routes that can subsequently be pursued, both explored in the talk. The first is to follow Cinque's (1999) functional hierarchy and claim that expressive epistemic modals (e.g. *seem*) are base-generated high in the left periphery while descriptive epistemic modals (e.g. *certain*) are base-generated low, while some epistemic modals (e.g. *likely*) are ambiguous. The second option is to adopt Lin’s (2012) analysis, in which modals are analyzed as quantifiers and as such are subject to QR. On this analysis, the two positions for the modals are derived syntactically via movement. From either base-generation
analysis or movement analysis it follows that lower modals allow reconstruction while high modals do not, even without negation as seen below:

(10) a. Somebody is certain to be lost on the way there. \( \exists \text{>> certain / certain>>} \exists \)
    b. Everybody seems to be lost. \( \forall \text{>> seem / seem>>} \forall \)

Thus (1) and (2.a) are explained by a combination of syntactic and semantic factors. However, we are left with Lasnik's second problem (2.b). Our solution is that likely is ambiguous between expressive and descriptive readings, but the use of explicit probabilities is strongly connected to objective chances which are descriptive. However, we can manipulate the context into a subjective reading of the probabilities (i.e. personal probabilities), which is expressive and thus has wide scope:

(11) There is a boxing match and I've place two bets, each bet on one of the boxers: "One of my bets is 100% likely to succeed". \( \exists \text{>>100%likely / 100%likely >>} \exists \)

References:


The Hebrew Lix’ora – Trimming the Hedge

Micky Daniels

Bar Ilan University

Data:
The Hebrew particle lix’ora can be roughly translated as allegedly, seemingly or supposedly, and in general seems to have a hedging effect. We identify three main cases where this particle applies, exemplified in (1)-(3):

(1) *Ha feniks gavta, lix’ora, dmei nihul Se-lo kadin*. (“The Phoenix (company) charged (its clients), lix’ora, fees unlawfully”) (Uttered by a news reporter who is aware of a number of facts which suggest that the Phoenix company indeed charged fees unlawfully, and he uses the hedge lixora e.g. to avoid being sued)

(2) *Lix’ora dani hu ha-roce’ax* (“Lix’ora Danny is the murderer”) (uttered by a person who heard his neighbors talking about facts which suggest that Danny is the murderer – e.g. that he hated the victim, and that he was found near the body with a knife in his hands), but uses the hedge since he knows an additional fact that weakens the certainty of this conclusion (e.g. that Yossi, who also hated the victim, ran away at the night of the murder, also holding a knife).

(3) *Lixo’ra yesh kan stira ba ktuvim*. (“Lixo’ra there is a contradiction in the scriptures here”), uttered by a Rabbi who shows that there are facts that suggest that there is a contradiction in the scriptures (e.g. that whereas chapter 1 in Kings, describes King Solomon as having forty thousand horse stables, chapter 9 in Chronicles, describing the exact same events and period, mentions four thousand lions, horses and chariots). However, the Rabbi knows an additional fact (namely that the reference in Chronicles refers to King David), which makes him conclude that there is no contradiction. He uses the sentence with lix’ora as a rhetorical device.

Notice that case (1) and (2) are similar to each other in that in both the speaker is expressing doubt about the truth of the prejacent, whereas in (3) the speaker is certain that the prejacent is false. On the other hand, (2) and (3) are similar to each other in that the reason for the hedge is the fact that the speaker (as opposed to others in the context) knows. In contrast, in (1) the reason for using the hedge is not a new known fact, but rather the status of the speaker as a newscast reporter, and the fear of being sued.

We further observe that lix’ora is odd in certain sentences, as in (4) and (5):

(4) #?lix’ora ha-SemeS zoraxat ba-mizrax (“lix’ora the sun rises in the east”)

(5) #?lix’ora ha-SemeS zoraxat ba-maarav (“lixora the sun rises in the west”)

Finally, notice that sometimes lix’ora operates on a nominal expression, as in (6):

(6) ha-miStara bodeket maasim pliliyim lix’ora Sel mar cohen (“The police is investigating criminal actions, lix’ora, by Mr. Cohen”)
Proposal:
We rely on Barker’s 2007 analysis of clear as involving manipulations on degrees of evidence required to conclude the truth of a proposition, and some analyses of evidentials (e.g. Davis, Potts and Speas 2007), which take this class of operators to include not only expressions indicating the type, but also the strength of evidence. We propose that lix’ora is an evidential particle, with a negative and a positive component (whose combination yields the hedging effect). In particular, we propose that lix’ora is a sentential operator with the following characterization:

1) lixora \( p \) is true in a world \( w_0 \) iff:
   (a – Negative component) It is not the case that in all ‘most normal’ worlds \( w’ \) where the set of facts known by the speaker \( (A_s) \) holds, given a degree of evidence used by the speaker \( (d_s) \), \( p \) also holds, and
   (b – Positive component) \( p \) does hold in all worlds \( w'' \), which are
      (i) identical to \( w’ \) in \( A_s \) but in which the degree of evidence used is not \( d_s \), but one used by a salient participant in the discourse \( d_c \), where \( d_c < d_s \) OR
      (ii) identical to \( w’ \) in \( d_s \), but where the set of facts known to a salient participant \( A_c \) holds, where \( A_c \subset A_s \)

Accounting for the Three Uses of lix’ora:
Case (1): In this case the difference between the worlds where \( p \) is assumed to hold (the positive component) and the worlds where this is not the case (the negative component) lies in the degree of evidence sufficient for reaching a conclusion. In this case, then, the set of facts \( A \) used as the basis for concluding the prejacent (“The Phoenix charged fees unlawfully”) is the same for both the speaker and his/her addressees (or else the addressees may accommodate \( A_s \)), but crucially, the speaker uses a degree of evidence higher than the default or standard degree used by his addressees, in order to be cautious. The implication, then, is that the truth of \( p \) is in doubt.

Case (2): Here the difference between the worlds where \( p \) is assumed to hold (the positive component) and the worlds where this is not necessarily the case (the negative component) lies in the set of facts that the speaker takes as the basis for concluding a proposition, which forms a superset of the set of facts known by the salient participants. In this case, the degree of evidence used by the speaker and the salient participants in the discourse is identical. Here too the implication is that the truth of \( p \) is in doubt.

Case (3) is similar to case (2), but differs from it in the implication that \( p \) is definitely false. We propose that this typically happens in expert contexts (see e.g. Zimmermann 2008, Gunlogson 2001) where the speaker is taken to be opinionated with respect to the truth value of \( p \). We show that the move from the weak negative component (roughly: the speaker is not in a position to conclude that \( p \) is true) to the stronger one (the speaker concludes that \( p \) is false) can be derived using a mechanism
similar to the one used in scalar implicatures, where by Gricean maxims, while the implication is only that the speaker is not in a position to know p, the actual implication is that the speaker knows not p (Fox 2006). We use this mechanism to explain why the false status of p can arise only when the difference between the positive and negative components lies in the set of known facts ($A_p$ vs $A_c$) and not in the degree of required evidence used.

We explain the infelicity of (4) and (5) by showing that, unlike what is required in conjunction of positive and negative in definition (1), in both cases there is no contrast between the set of facts known to the speaker and the (default) addressees: in (4) both the speaker and addressees take the known facts and the degree of evidence required to support the truth of p, and in (5) both take these facts and degree to support the falsehood of p.

Finally, we show that unlike the apparent (lix’ora!) nominal scope of lixora in (6), it still functions as a sentential operator, hedging the presupposition that Mr. Cohen was involved in criminal activities.

**Comparisons with Other Particles:**

We compare lix’ora to several similar particles discussed in the literature. For example, unlike Barker’s analysis of clear, our analysis of lix’ora indicates that it does not only have side effects (information about the discourse) – manipulating the standard degree of evidence required, but potentially also main effects (information about the world), given the potential contrast in facts known by the speaker and a salient participant. As we progress in our research, we plan to compare lix’ora to epistemic modals (per von Fintel & Gillies 2006) as a sort of evidential, and as a particle that uses a judge-parameter (similar to predicates of personal taste, as in Stephenson 2007 and McCready 2007), and show that lix’ora behaves more similarly to modal evidentials than to discourse ones. In addition, we will explore Zaroukian’s 2010 analysis of approximating modal operators (as in John has maybe 40 books) and show that similar effects can be found with lix’ora:

(7) ha-xeder li’xora naki (“The room is lix’ora clean” Implication: The room is not completely clean).
Modern Hebrew verb stems, similarly to those in other Semitic languages, are templatic, subject to specific vocalic patterns (*binyanim*). Greenberg (1950) observes that there are no verbs in Arabic in which the first two stem consonants are identical (e.g. *didem*), and more generally, homorganic consonants tend not to co-occur within the same stem.\(^1\) McCarthy (1979, 1986) claims that the stem consonants and the vocalic pattern are independent morphological units, which appear on different tiers. Since the stem consonants are adjacent on their tier, the OCP constraint (which prohibits the co-occurrence of adjacent similar elements, Leben 1973) demands that the first two consonants not be similar (McCarthy 1988, 1994). By analyzing Arabic stem consonants, Frisch et al. (2004) suggest that OCP (and specifically OCP-place) should be a gradient constraint, based on the similarity degree between two segments. This hypothesis has also been studied empirically. For instance, using different lexical decision tasks involving written nonce-verbs, Berent and colleagues show that Hebrew speaking subjects are sensitive to the OCP effect in the stem consonants (Berent and Shimron 1997; Berent, Everett and Shimron 2001, Berent, Shimron and Vaknin 2001, Berent, Marcus, Shimron and Gafos 2002, Berent, Vaknin and Marcus 2007).

This paper describes an experimental study testing Frisch et al.’s (2004) proposal. A lexical decision experiment was carried out on 33 native Hebrew speakers, in which the subjects listened to different verbs and nonce-verbs and were asked to determine whether the verb was an existing Hebrew verb. The experiment aims to check whether the subjects are sensitive to the OCP constraint in general, and whether the constraint is gradient with respect to articulatory features.

The results show that the subjects are sensitive to the OCP-place constraint. A paired t-test reveals The reaction time (hereinafter: RT) of the non-homorganic \(C_1C_2\) was significantly greater than the RT for the homorganic \(C_1C_2\) (\(t(34)=5.99, p<0.0001\)), as can be seen in figure (1). Thus, the subjects needed more time to decide that the non-homorganic \(C_1C_2\) verbs are not part of their lexicon. When \(C_1\) and \(C_2\) are homorganic, the gap in the lexicon is systematic and predicted due to the OCP-place constraint. Thus, the OCP-place provides the subjects with a cue that these verbs are nonce-verbs, and the RT is shorter.

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\(^1\) apart from the pairs of identical consonants in \(C_2\) and \(C_3\)
However, a Repeated Measures ANOVA test reveals that the differences among the groups which violate the OCP to different degrees are not significant (F(3,128)=0.61, p=0.61), as can be seen in figure (2). It seems that sharing the place feature, i.e. homorganic C₁ and C₂, is a sufficient condition for the subject to determine quickly that the verb is a nonce-verb. This is compatible with McCarthy's claim (1988, 1994) that the shared place of C₁ and C₂ causes OCP-place violation in Semitic stems.

Figure 2: Mean RT by condition

Bibliography


During the course of language acquisition, children often produce an output syllable that has no corresponding syllable in the target word, as in Hebrew \( \text{ken} \rightarrow [\text{s\text{ken}}] \) ‘yes’ (RM 1;05.22). These additional syllables, generally termed \textit{filler syllables}, are attested in the early speech of children acquiring various languages, in ways that appear to be systematic to some extent (Veneziano and Sinclair 2000, Peters 2001, Demuth 2001 to name a few). The following work reviews the phenomenon of filler syllables in the early speech of a monolingual Hebrew-acquiring girl. The attested patterns of filler syllables’ dispersion indicate their role as potential tools for prosodic adjustments in developing grammars, during acquisition phases of prosodic constituents.

For this study, we focus on speech recordings of one typically developing monolingual Hebrew acquiring girl, RM. We present longitudinal corpus-based data collected throughout 33 weekly sessions recorded over 10 months, from age 1;03.13 to 2;00.09. The data are based on corpora from the longitudinal \textit{Child Language Project} headed by Outi Bat-El and Galit Adam\(^2\). The filler syllables (tokens) found in the data comprise 6.3% (313/4,979) of the total number of productions during that period.

Filler syllables have a variety of definitions, each of which is critical for the set-up of the relevant data for further analysis. Our criteria for defining filler syllables do not presuppose that fillers are limited to prefixed positions (as many previous studies did), yet we take measures to ensure that actual fillers are not overlooked while general epenthesis processes are not confused with augmentation processes (only the latter are considered as fillers).

The obtained data are analyzed against pre-defined stages in RM’s acquisition of prosodic units to show that the distributional patterns of filler syllables can be attributed to prosodic requirements such as minimal word and foot type preferences during early stages of acquisition, and the emergence of concatenative morpho-syntax at later stages, where prosodic units above the phonological word begin to appear.

The appearance of filler syllables at later stages of acquisition is commonly attributed to the development of early morpho-syntactic units, and, therefore, bears theoretically problematic interactions with various domains of grammar, such as morphology and syntax (Peters 2001). In our view, a proper analysis of filler syllables is possible with “pure” phonological devices that rely on the prosodic hierarchy (Selkirk 1978, 1986, Nespor and Vogel 1986), since the prosodic hierarchy already

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encapsulates an underlying interaction with morpho-syntactic domains, i.e., there is no explicit need to address morphological or syntactic entities in order to explain the interaction of morpho-syntax with the appearance of fillers at later stages.

Selected References


Expressing and Describing Modality

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Epistemic modals (henceforth EM) are classically taken to be truth-conditional quantifiers over possible worlds (cf. Kratzer, 1981; Lewis, 1986). As such, they modify the propositional content of utterances. This paper argues that there is another aspect of EM, which modifies the expressive content of utterances, a separate dimension of meaning that exists cross-linguistically (Potts et al. 2009) and interacts with the descriptive truth-conditional content in many ways. Expressive EM share properties with other expressives such as epithets (the bastard) attributive adjectives (damn) and honorifics. Following Potts (2007), these properties include independence, nondisplaceability, perspective-dependence, descriptive ineffability, immediacy and repeatability. The following examples show how (some of) these properties are manifested in expressive EM and other expressives as opposed to descriptive (i.e. truth-conditional) EM. Independence, in which expressives contribute to a dimension of meaning separate from the regular descriptive content, is manifested in assents to assertions. Expressive EM, as well as other expressives, can be excluded from the assent, i.e. Sue can agree that Kresge is famous without thereby agreeing that he's a bastard and Dave can agree that John is lonely disregarding modality, but Mary's agreement doesn't seem to mean that it will be raining:

(1) a. Dave: That bastard Kresge is famous. (Potts, 2007)
   Sue: I agree (Kresge is famous).
   b. Sue: John's girlfriend left him, he might be lonely.
   Dave: I agree (John is lonely).
   c. Sue: It's cloudy, it might be raining soon.
   Mary: I agree (#it will be raining).

Nondisplaceability, in which expressives are not easily embeddable (e.g. under conditionals):

(2) a. #If that bastard Kresge arrives on time, he should be fired for being so mean.(Potts, 2007)
   b. #If Max might be lonely, his wife will be worried. (Papafragou, 2006)
   c. If it might rain tomorrow, people should take their umbrellas. (Papafragou, 2006)

Perspective-dependence, in which expressives are bound to the perspective of the speaker:

(3) a. #That bastard Kresge is famous, but I personally think that he's a good guy.
   b. #Max might be lonely, but I personally think that he isn't.
   c. It might rain tomorrow, but I personally think that it won't.

Immediacy, in which expressives, like performatives, have immediate effect and are thus bound to the utterance situation:

(4) a. #That bastard Kresge was late for work yesterday, but he’s no bastard today, because today he was on time. (Potts, 2007)
b. John might have been lonely yesterday, but that's not true today, because today we found out that he was actually out on a date.

c. There might have been ice cream in the freezer yesterday, but that's not true today, because today we found out that the freezer never worked. (a variation of von Fintel & Gillies, 2008)

Other evidence for the difference between the two types of EM comes from interactions with quantifiers: von Fintel & Iatridou (2003) claim that EM are obligated to take wide scope over various quantifiers (the Epistemic Containment Principle) rendering the following infelicitous:

(5) a. #Every candidate might win.
   
b. #Every student might be the tallest person in the department.

However, this obligation lifts when an objective stance is indicated:

(6) a. Objectively speaking, every candidate might win. (Tancredi, 2007)
   
b. As is widely known, every person in our fund-raising events might be the richest person in the country.

Further evidence comes from Dutch, in which EM are interpreted objectively by default, (are thus descriptive) and can have narrow scope (cf. Huitink, 2008):

(7) a. Slechts weinig studenten kunnen de langste van de klas zijn.
   
   'Just a few students might be the tallest of the class'.

In order to formally capture the expressive-descriptive distinction I propose an assertion operator which distinguishes between the propositional content of a speech act and the degree of strength (i.e. belief) by which it is performed (cf. Vanderveken, 1990-1):

(8) $A_x[C,S]$ 'x asserts propositional content C with a degree of strength S'

Both types of EM convey degrees of belief which are graded modal notions and are thus well described using probability measures (cf. Yalcin, 2007; Lassiter, 2010). Expressive EM are represented by Bayesian probability which stands for the personal probability that an agent assigns to a proposition. Descriptive EM are represented by an objective probability which is a mixture of beliefs of many individuals. The language is based on Halpern's (1990) logic, in which a structure is a tuple $<D,W,π,f>$, where $D$ is a domain, $W$ is a set of possible worlds, $π$ is a valuation function, and $f$ is a discrete probability function on $W$. $P(φ)$ is a distinguished propositional function which stands for the probability of $φ$, such that for any proposition $φ$, a set of worlds $W$, model $M$, world $w$ and assignment function $g$:

(9) $||P(φ)||_{M,w,g} = f(\{ w ∈ W | (M,w,g) □ φ \})$

Assuming a standard norm of assertion, in which default assertions are performed with a high degree of belief (at least), when high stands for some numerical value:

(10) a. John: Alfred is unmarried.
   
b. $A_{John} [ Unmarried(Alfred), P(Unmarried(Alfred)) ≥ high]$

Assertions in which EM are used expressively are performed with a lower (for possibility) or higher (for necessity) than default degree of belief, depending on the modal force:
(11) a. John: Alfred might be unmarried.
    b. $A_{\text{John}} [\text{Unmarried}(\text{Alfred}), P(\text{Unmarried}(\text{Alfred})) > 0]$

As can be seen, the expressive modal modifies the degree of belief and is therefore not part of the content. The speaker (i.e. John) asserts that Alfred is unmarried but this assertion is not a regular one since the belief by which the assertion is made is particularly low (i.e. non-zero). As opposed to expressive EM, the descriptive use is a run-of-the-mill assertion. It is performed with a default (high) degree of belief, just like a non-modalized assertion. As can be seen, the modal is part of the proposition in this case:

(12) a. John: Alfred might be unmarried.
    b. $A_{\text{John}} [P(\text{Unmarried}(\text{Alfred})) > 0, P(P(\text{Unmarried (Alfred)}) > 0) \geq \text{high}]$

Here, John asserts that there is some chance (i.e. non-zero) that Alfred is unmarried, with a default degree of belief, which makes it a regular modal assertion. Importantly, both types of EM contribute the same probability measure (greater than 0), therefore the ambiguity is not lexical but rather derived from different scopes. The subjective probability has wide scope, thus in (11) the expressive modal scopes over the proposition and in (12) the degree of belief scopes over the descriptive modal. Expressive EM thus modify the whole speech act while objective EM modify the content of the speech act and have narrow scope. As a result, the context-update effects of expressive and descriptive EM are completely different. Assertions made with expressive might are harder to accept since the speaker expresses uncertainty towards them, as opposed to descriptive might assertions which are made with a high certainty. However, if an expressive might assertion is accepted, it will update the context in a stronger manner – an update of (11) will be with the set of worlds in which Alfred is unmarried while an update of (12) will be with the set of worlds in which there is a greater than zero chance that Alfred is unmarried.

References:


Revisiting Reduplication

Toward a description of reduplication in predicative signs in Swedish Sign Language

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The notion of morphological processes in sign languages is a domain still in need of further investigation. Unlike spoken languages, sign languages generally avoid sequential and segmental morphology, showing instead a preference toward sign internal modification (Johnston 2006). One morphological process that seems to be ubiquitous in the sign languages of the world is reduplication. Reduplication in sign languages—as in spoken languages—has been shown to express a variety of meanings, and an iconic element is usually prevalent regardless of language modality.

Reduplication in Swedish Sign Language (SSL) has been recognized in previous studies (Bergman 1983; Bergman & Dahl 1994), but it has not been subject to a more extensive investigation. Thus, this study intended to investigate the use of reduplication in SSL in more depth, the main area of investigation being reduplication with regard to its application to (a) dynamic vs. stative predicates, (b) the phonological status of the predicative signs and the resulting readings, and (c) the applicability and function of oral reduplication and its relation to the manual one.

The data used for this study come from two sources: the primary data set is a small-scale corpus consisting of pre-recorded monologues, dialogues and interviews in SSL from the Swedish Sign Language Corpus project (Mesch 2011), the ECHO project (Bergman & Mesch 2004), and some monologues used for teaching purposes; the secondary set of data was obtained through work with an informant mainly functioning as a language consultant—a Deaf, native signer of SSL.

The functions of reduplication in SSL mirror those found for spoken languages and other sign languages. Different types of pluractionality (iteration, habituality, frequentativity, plural referents/goals) and ongoing event are the meanings associated with SSL reduplication. In dynamic predicates, a division of durative/atelic and punctual/telic predicates is—often—reflected in the phonology of SSL verbs, as previously found for American Sign Language by Wilbur (2009). This also relates to reduplication in that atelic predicates often get an ongoing reading, whereas telic predicates get a pluractional reading, which matches the findings by Bergman (1983). There might also be a connection between reduplicated forms and nominal signs, as reduplicated predicates sometimes resemble verbal nouns more than true predicates. All uses of reduplication in SSL match the typological findings of reduplication by Bybee et al (1994) for spoken languages.

In this study, statives were also found to be reduplicated in SSL (see table 1 below).
Table 1: The functions of reduplication with stative predicates.

<table>
<thead>
<tr>
<th>Temporary state</th>
<th>Inherent property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plural states (e.g. frequentative)</td>
<td>Yes</td>
</tr>
<tr>
<td>Plural referents</td>
<td>Yes</td>
</tr>
<tr>
<td>Intensification</td>
<td>Yes</td>
</tr>
</tbody>
</table>

As would be expected, mostly stative predicates expressing temporary states were found to be reduplicated, whereas the non-temporary ones tend to be used only in constructions denoting plural referents each having the feature of the predicate. However, the temporary state statives were found to express functions similar to those with dynamic predicates: intensification; pluractionality (plural states); and plural referents. What is interesting in the informant data is that reduplication of many temporary state statives express the inclination of some state occurring repeatedly, such that they express characteristic properties of some referent. This would be an extension similar to findings in spoken languages—perhaps also in the sense of e.g. habitual reduplications being extended to have what could be regarded as a nominalizing function (i.e. ‘someone who usually Xes’ = ‘an Xer’).

Reduplicating the oral component (borrowed from spoken Swedish or “genuine” to SSL) of a sign together with manual reduplication is shown to frequently occur in predicates expressing pluractionality, but rarely with predicates expressing ongoing event or intensification. Thus, manual reduplication with oral reduplication preferably expresses external event plurality—i.e. events being distributed over several referents and/or over several occasions. This is illustrated in table 2 below.

Table 2: The distribution of oral reduplication for different meanings

<table>
<thead>
<tr>
<th>Pluractionality</th>
<th>Ongoing event</th>
<th>Generic activity</th>
<th>Intensification</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>No oral reduplication</td>
<td>54</td>
<td>39</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>Oral reduplication</td>
<td>46</td>
<td>6</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>45</td>
<td>24</td>
<td>7</td>
</tr>
</tbody>
</table>

This study also shows that the oral component of signing can have a special function with regard to reduplication in SSL. By reduplicating the oral component of a sign within a single manual movement, the signer may express what resembles ongoing event also with telic predicates. The result is a reading where the internal process of a single instance of the predicate is highlighted, but is not completed until the manual component reaches its endpoint, i.e. it highlights the process leading up to the inherent endpoint. Thus, this type of process shares both form and function with that of manual
reduplication, and deserves to be treated as a subcategory within the domain of reduplication in SSL.

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