

Ellipsis (Modern Hebrew)

Edit Doron (to appear in the Encyclopedia of Hebrew Language and Linguistics)

The syntactic structure of a sentence consists of a construction of syntactic constituents. Some of these constituents are phonologically realized (overt), and others may be phonologically null (covert). The grammar of Modern Hebrew allows null constituents in a wide variety of constructions (Borochofsky Bar-Aba 2007, 2008, 2010, Uziel-Karl and Berman 2000).

The phonologically null expression of constituents is sometimes considered the manifestation of colloquial, careless, hasty speech found in non-standard or immature registers. Yet research in general linguistics points to its being as much a part of the core grammar of language as are other structural phenomena, and to its strictly rule-governed nature. Moreover, null constituents are attested in written as much as oral language. This might be attenuated in the case of particular subtypes of null constituents (e.g. some types of *null-complement anaphora*) which tend to be independent of a linguistic antecedent and mostly depend on context for their interpretation. These particular null constituents are probably typical of speech rather than written texts, since reliance on context is reduced in written compared to oral medium.

Among null constituents, it is possible to distinguish two types: *null anaphora* and *ellipsis* (Hankamer and Sag 1976).

- Null anaphors are constituents whose denotation can be pragmatically determined, i.e. determined by the non-linguistic context, rather than necessarily by identity with corresponding overt antecedents within the linguistic discourse, as is strictly required in ellipsis.
- In those examples where null anaphors do nevertheless have a linguistic antecedent, the structural or locality conditions on the relation between the null anaphor and its antecedent differ from the conditions restricting this relation in the case of ellipsis.
- Null anaphors are similar to lexical pronouns in that they do not have a complex internal structure. Ellipsis, on the other hand, encompasses the full syntactic structure of its antecedent constituent, albeit covertly. As a result, null anaphors are *strict* in their interpretation, whereas the interpretation of ellipsis can be *sloppy*. These terms are explicated below as part of the detailed discussion of ellipsis.

Null anaphora: null-complement anaphora vs. pro-drop

Null anaphors are the arguments of syntactic heads such as V(erb) / P(preposition)/ D(eterminer). They are licensed either by agreement features marked on these heads, or else as the complements of these heads.

Examples (1) and (2) below are attested examples from Israeli TV (channel 10), which will serve to introduce the discussion of null anaphora. Example (1) is taken from an advertisement. The first clause contains a null nominal complement of the verb *check*. The denotation of this complement – the prices of goods in a competing

supermarket – is recoverable from the context rather than from a linguistic antecedent. The second clause contains a null clausal complement of the verb *need*. The denotation of this clause is recoverable from the preceding clause.

1. אנהנו בודקים, כדי שאתם לא תצטרכו
'anaxnu bodqim, kede še-'atem lo tištarxu
 we check.PRTCPL.M.PL, in-order that-you.M.PL not need-FUT.2M.PL
 'We check (the prices), so that you won't need (to check the prices).'

Example (2) is from a news item on the expulsion of all Sepharadi students from a Haredi (Ultra-Orthodox) institution as a measure to "end" discriminatory conduct towards them. The example contains three covert constituents: both the subject and the complement of the verb *discriminate*, and the complement of the negative existential particle. All three are recoverable from the context, yet they are syntactically different. The denotation of the covert subject is limited by the agreement features inflecting the verb, while the other two are not restricted by any morphological marking of the heads that license them.

2. איך יפלו אם אין?
'ex yaflu 'im 'en
 how discriminate-FUT.3M.PL if NEG-BE
 'How will (they) discriminate (against such students) if there aren't (any of them)?.'

A. Null-complement Anaphora

Null anaphors which are not related to agreement features on syntactic heads are licensed as complements of these heads (but not as subjects), and are known as *null-complement anaphora*. There are often no linguistic antecedents for null-complement anaphors, and there are no linguistic clues for the identity of these antecedents, such as agreement features. Accordingly, null-complement anaphora is heavily dependent on context for its interpretation. As such, it is often found in speech, and might be less typical of written texts, where reliance on context is usually reduced.

Null-complement anaphora is attested in Modern Hebrew by nominal, prepositional and clausal complements of a head. The following three examples illustrate these complements in the case of a V head:

3. הבאתי בקבוק יין. תודה, שים על השולחן
heveti baqbuq yayin. toda, sim 'al ha-šulḥan
 bring.PAST.1S bottle.CNSTR wine. thanks, put.IMP.M.S on the table
 'I brought a bottle of wine. Thanks, put (it) on the table.'
4. הנחתי בקבוק יין על השולחן, ורינה הניחה עוגה
hinaxti baqbuq yayin 'al ha-šulḥan, ve-rina hinixa 'uga
 place.PAST.1S bottle.CNSTR wine on the table, and-Rina place.PAST.3F.S cake
 'I placed a bottle of wine on the table, and Rina placed a cake (on the table).'
5. רציתי לפתוח את היין, אבל אמא לא מרשה
rašiti li-ftoax 'et ha-yayin, 'aval 'ima lo marša
 want.PAST.1S to-open ACC the-wine, but mom not allow.PRTCPL.F.S
 'I wanted to open the wine, but mom does not allow (it).'

The following two examples illustrate null nominal complements P and D respectively:

6. תמיד תחשוב לפני ואחרי, לא תוך כדי
tamid taḥšov lifne ve- 'aḵare, lo toxkede
 always think.FUT.2M.S before and-after, not while
 'Always think before and after, not while.'

7. דינה קראה שלושה ספרים חדשים. אני קראתי שניים (ישנים)
dina qar'a šloša sfarim ḵadašim.
 Dina read.PAST.3F.S three.M books.M.PL new.M.PL.
'ani qarati šnayim (yešanim)
 I read.PAST.1S two.M (old.M.PL)
 'Dina read three new books. I read two (old books).'

In (7) above the determiner D is indefinite, whereas in (8) below, it is the definite article. Since the definite article is a clitic, it must be supported by an adjective or some other modifier for the null noun to be licensed. This is not necessary with the indefinite D in (7), unless it is inflected in the construct state, in which case it too requires support by an adjective, as shown in (9). Notice that a star which **precedes** parentheses signals obligatoriness of the material within the parentheses:

8. דינה קראה את הספר החדש. אני קראתי את ה*(ישן)
dina qar'a 'et ha-sefer ha-ḵadaš.
 Dina read.PAST.3F.S ACC the book DEF-new.
'ani qarati 'et ha-(yašan)*
 I read.PAST.1S ACC DEF-*(old)
 'Dina read the new book. I read the old (book).'

9. דינה קראה שלושה ספרים חדשים. אני קראתי שני*(ישנים)
dina qar'a šloša sfarim ḵadašim.
 Dina read.PAST.3F.S three.M books.M.PL new.M.PL.
*'ani qarati šne *(yešanim)*
 I read.PAST.1S two.CONSTR.M *(old.M.PL)
 'Dina read three new books. I read two (old books).'

B. Pro-drop

Null pronouns licensed by agreement features are often referred to as *pro-drop* [cross reference: pro drop]. Pro-drop is most commonly attested in Modern Hebrew by null subjects of tensed verbs and null complements of inflected prepositions, determiners, and nouns. In (10), the null subject is licensed by the verb's nominative subject-agreement inflectional affix. In (11), the null complements of the preposition, noun and determiner are licensed by genitive agreement inflectional affixes.

10. Null subject licensed by nominative agreement marking of V ישב *yašav* 'sit'
 ישבתי ליד התלמידים
yašavti leyad ha-talmidim
 sit.PAST.1S next-to the-student.M.PL
 'I sat next to the students.'

11. Null complement licensed by genitive agreement marking of N לב *lev* 'heart',
 D כל *kol* 'all' and P של *šel* 'of'
 לבי כולו שלך

lib-i kul-o šel-xa
heart.M-1S all-3M.S of-2M.S
'My heart is all yours.'

Accusative direct object agreement marking of verbs is practically obsolete in Modern Hebrew, and only found in very formal registers, usually with infinitival verbs:

12. Null direct object licensed by accusative agreement marking of the V הטריד *hiṭrid* 'bother'

הקור חדל להטרידני
ha-qor xadal le-haṭrid-eni
the-cold stop.PAST.3M.S to-bother.INF-1S
'The cold stopped bothering me.'

Ellipsis: sluicing, bare-argument ellipsis, VP-ellipsis, gapping, comparative ellipsis

A. Sluicing

The ellipsis of clauses is known as *sluicing* (Ross 1969):

13. דני לקח משהו, אבל אני לא זוכרת מה
dani laqax mašehu, 'aval 'ani lo zozeret ma
Dani take.PAST.3M.S something, but I not remember.PRTCPL.F.S what
'Dani took something, but I don't remember what (he took).'

14. דני לקח ספר, אבל אני לא זוכרת איזה
dani laqax sefer, 'aval 'ani lo zozeret 'eze
Dani take.PAST.3M.S book, but I not remember.PRTCPL.F.S which
'Dani took a book, but I don't remember which (he took).'

As discussed by Chung et al 1995, Merchant 2001, this construction is licensed by the presence of an indefinite noun-phrase in the first clause in a position parallel to that of the original position of the interrogative word within the elided clause. This appears to be the unmarked case in Modern Hebrew as well.

Interestingly, the fronting of prepositions in sluicing is optional, in contrast to its obligatoriness in interrogative clauses elsewhere in the language. Unlike English, which allows stranded prepositions, e.g. *Who did she speak with?*, Hebrew disallows the stranding of prepositions, not to be confused with the acceptability of prepositions with null complement anaphora or pro-drop (illustrated above in (6) and (11) respectively). In Hebrew, prepositions are required to front to clause-initial position alongside question words [cross reference: interrogative clauses]. But in sluicing, the preposition may be stranded rather than fronted, since the elision of the clause eventually salvages it from the ungrammaticality ensued by the stranded preposition. Thus in (15), the question word מי *mi* 'who' may be found unaccompanied by the preposition עם *'im* 'with'. Though that would indicate that the preposition has been stranded, the construction is grammatical nevertheless, since the stranding is internal to an unpronounced clause, i.e. the elided clause 'she was kissing with':

15. אני יודעת שדינה התנשקה עם מישהו, אבל אני לא זוכרת (עם) מי
'ani yoda'at še-dina hitnašqa 'im mišehu,
I know.PRTCPL.F.S that-Dina kiss.PAST.3F.S with someone

'aval 'ani lo zozeret (im) mi
 but I not remember.PRTCPL.F.S (with) who
 'I know that Dina was kissing with someone, but I don't remember (with)
 whom (she was kissing (with)).'

Modern Hebrew also has a marked type of sluicing, with a definite noun-phrase in the antecedent clause. Sluicing with definite noun-phrases is conditioned by a contrastive relation between the two clauses. This in turn relies on strict syntactic parallelism between them. In order to maintain the parallelism, fronting of the preposition alongside the wh-phrase becomes obligatory once again, so as to match the corresponding preposition in the first clause. Thus the preposition עם 'im 'with' is obligatory in (16) alongside the question word מי mi 'who':

16. אני יודעת שדינה התנשקה עם דני, אבל ההורים שלה לא יודעים* (עם) מי
 'ani yoda 'at še-dina hitnašqa im dani,
 I know.PRTCPL.F.S that-Dina kiss.PAST.3F.S with Dani,
 'aval ha-horim šela lo yod'im *(im) mi
 but the-parents hers not know.PRTCPL.M.PL *(with) who
 'I know that Dina was kissing with Dani, but her parents don't know with
 whom (she was kissing).'

B. Bare-argument ellipsis

Ellipsis where a single remnant is introduced by a conjunction or complementizer has been called *bare-argument ellipsis* (Hankamer 1979):

17. דינה הניחה את המתנה על השולחן, אבל דני לא
 dina hinixa 'et ha-matana 'al ha-šulḥan, 'aval dani lo
 Dina place.PAST.3F.S ACC the-present on the-table, but Dani not
 'Dina placed the present on the table, but not Dani.'

The remnant may be any constituent, not necessarily the subject:

18. לא הנחתי את המתנה על השולחן, אבל את הצלחות כן
 lo hinaḥti 'et ha-matana 'al ha-šulḥan, 'aval 'et ha-šalaxot ken
 not place.PAST.1S ACC the-present on the-table, but ACC the-dishes yes
 'I did not place the present on the table, but the dishes I did.'

The following is an attested example:

19. אם המהלך יתפשט בחברה החרדית, הוא ישנה אותה מהיסוד וכנראה שגם את מדינת ישראל
 'im ha-mahalax yitpašeṭ b-a-ḥevra ha-ḥaredi.F,
 if the-development spread.FUT.3M.S in-the-society.F DEF-haredi.F,
 hu yešane 'ot-a me-ha-yesod,
 it transform-FUT.3M.S ACC-her from-the-foundation
 ve-kanir'e še-gam 'et medinat yisra'el
 and-probably that-also ACC state.CNSTR Israel
 'If the development spreads within Haredi society, it will transform it
 fundamentally, and probably the state of Israel as well.' (Haaretz)

If the bare argument is part of an elliptical yes-no question attached to a constituent question, the construction is sometimes called a *split question* (Arregi 2010):

20. מה רותי הביאה למסיבה? האם את עוגת השוקולד?
ma ruti hevi'a l-a-mesiba?
 what Ruti bring.PAST.3F.S to-the-party?
 ha'im 'et 'ugat ha-šoqolad?
 whether ACC cake.CNSTR the-chocolate?
 'What has Ruti brought to the party? (Has she brought) the chocolate cake?'
21. איפה רותי שמה את העוגה? האם במקרר?
 'efo ruti sama 'et ha-'uga? ha'im b-a-meqarer?
 where Ruti bring.PAST.3F.S ACC the-cake? whether in-the-fridge?
 'Where has Ruti put the cake? (Did she put the cake) in the fridge?'

C. Verb-phrase ellipsis

Ellipsis which conserves the finiteness marking of the clause together with the clause's subject, i.e. elides just the verb phrase, has been called *VP-ellipsis* (Sag 1976, Williams 1977). Unlike English where the remnant of VP-ellipsis typically involves an auxiliary, e.g. *do*, VP-ellipsis in Modern Hebrew leaves behind the verb (Doron 1999). This is so since finiteness is normally marked on the verb in Modern Hebrew, and not on an auxiliary. It is possible for the verb to remain in the clause while VP is elided, since the verb may be extracted out of the verb phrase prior to VP elision. But since the verb remains, it is often difficult to distinguish VP-ellipsis from null-complement anaphora, as the following example demonstrates:

- 22.a את סרגת את הסוודר הזה?
 'at saragt 'et ha-sveder ha-ze
 you knit.PAST.2F.S ACC the-sweater DEF-this
 'Did you knit this sweater?'
- b לא, אמא שלי סרגה
 lo, 'ima' šeli sarga
 no, mother mine knit.PAST.3F.S
 'No, my mother knit (it).' or 'No, my mother did.'

The ambiguity in this particular example can be ignored with no harm done, but it cannot be ignored in general since it often results in a difference in truth values, as when the missing constituent happens to contain a pronoun. The interpretation of such a pronoun can only be *strict* if the missing constituent is a null-complement anaphor. Since the pronoun's interpretation may in fact also be *sloppy*, this proves that the missing constituent must also be analyzed as VP-ellipsis:

- 23.a דינה סורגת את הסוודרים שהיא לובשת?
 dina soreget 'et ha-svederim še-hi lovešet
 Dina knit.PRTCPL.F.S ACC the-sweaters that-she wear.PRTCPL.F.S
 'Does Dina knit the sweaters she wears?'
- b לא, אבל אמא שלה סורגת
 lo, 'aval 'ima' šela soreget
 no, but mother hers knit.PRTCPL.F.S
 'No, but her mother knits (them).' or 'No, but her mother does.'

Two translations are given above for (23b), ignoring a third, irrelevant, translation where *knit* is interpreted as an intransitive verb. The first one of the two relevant

translations of (23b), which is the null-complement reading, can only be about Dina's sweaters, the referent of the noun phrase in (23a), which is the antecedent of the null anaphor (them). Under this reading, (23b) states that Dina's mother knits Dina's sweaters. This is indeed a possible interpretation of (23b). But (23b) has another interpretation, formulated by the second translation, which involves the property of knitting one's own sweaters. (23b) can be interpreted as saying that Dina's mother has this property, i.e. that Dina's mother knits her own sweaters. For the computation of this property, the complete structure of the antecedent verb-phrase must be part of the structure of (23b), so as to allow the pronoun *she* to be re-interpreted as referring to Dina's mother instead of Dina. The inclusion of the complex structure of the missing constituent is a characteristic of ellipsis, in this case VP-ellipsis. Doron 1999: 131-132 also shows differences in the locality restrictions on the relation between the null constituent and its antecedent in the two different readings.

Below is an additional example demonstrating that clauses which have undergone VP-ellipsis may nevertheless contain a remnant verb:

24. דני ישב על כל כיסא שבן-גוריון ישב
dani yašav 'al kol kise še-ben-gurion yašav
 Dani sit.PAST.3M.S on every chair that-Ben-Gurion sit.PAST.3M.S
 'Dani sat on every chair that Ben-Gurion sat on.'

This example is due originally to Cole 1976, who notes the puzzling absence of P+resumptive pronoun which is otherwise obligatory in all Modern Hebrew relative clauses which relativise a complement of P: [cross reference: relative clauses]

25. דני ראה כל כיסא שבן גוריון ישב*(עליו)
*dani ra'a kol kise še-ben-gurion yašav *(al-av)*
 Dani see.PAST.3M.S every chair.M.S that-Ben-Gurion sit.PAST.3M.S *(on-3M.S)
 'Dani saw every chair that Ben-Gurion sat on.'

The reason for the obligatoriness of the resumptive pronoun in relative clauses such as the one in (25) is the ban against preposition stranding in Hebrew already mentioned above in the context of interrogatives (example (15)). This ban is also enforced in relative clauses. Here again Hebrew differs from English, which allows preposition stranding in relative clauses as much as in interrogative clauses (e.g. the English translations of (24) and (25)). It was demonstrated in the discussion of (15) above that clauses with preposition stranding can be salvaged in Hebrew by ellipsis. Ellipsis is indeed what accounts for the surprising grammaticality of (24). Within the relative clause of (24), a complete VP including a stranded preposition has been elided. As mentioned above, the verb, in this case ישב *yašav* 'sit', remains within the relative clause, since it has been extracted from the verb phrases prior to VP ellipsis. The elision of VP salvages the construction: though it contains a stranded preposition, VP is nevertheless grammatical since it is unpronounced. This is represented in (26), which is the logical form of (24). The elided, unpronounced, VP is marked in (26) with strikethrough: [~~*yašav 'al* \emptyset_{NP}~~]_{VP}. It includes the stranded preposition preposition 'al 'on', followed by its null NP complement, which has been relativised, represented as \emptyset_{NP} . (26) is an example of the so-called *antecedent contained ellipsis* (May 1985) – the elided VP in this structure is contained within its own antecedent, the main clause VP.

26. *dani yašav [~~yašav 'al [kol kise še-ben-gurion yašav [~~yašav 'al~~ \emptyset_{NP}]~~]_{VP}]_{NP}]_{VP}*
 Dani sat on every chair that-Ben-Gurion sat
 'Dani sat on every chair that Ben-Gurion did.'

According to the structure shown in (26), a translation for (24) more appropriate than the one actually found in (24) would be the one in (26), formulated with VP-ellipsis: 'Dani sat on every chair that Ben-Gurion did.'

D. Gapping

The ellipsis of syntactic heads functioning as main predicates of the clause has been named *gapping* (Ross 1970):

27. V-gapping

דינה כעסה על דני, ורותי על דוד
dina ka 'asa 'al dani, ve-ruti 'al david
 Dina be.angry.PAST.3F.S on Dani, and-Ruti on David.'
 'Dina was angry at Dani, and Ruti (was angry) at David.'

28. A-gapping

דינה גבוהה מדני, ורותי מדוד
dina gvoha mi- dani, ve-ruti mi- david
 Dina tall.F.S from-Dani, and-Ruti from-David.'
 'Dina is taller than Dani, and Ruti (is taller) than David.'

29. N-gapping

דינה ידידה של דני, ורותי של דוד
dina yedida šel dani, ve-ruti šel david
 Dina friend.F.S of Dani, and-Ruti of David.'
 'Dina is a friend of Dani, and Ruti (is a friend) of David.'

Gapping is typically only allowed in parallel constructions, such as (30) below, and as such is more restricted than null anaphora, as can be seen by comparing the ungrammatical (31) to the corresponding grammatical null-complement anaphora in (1) above:

30. אנחנו בודקים את המחירים, ואתם את המסלול
'anaxnu bodqim 'et ha-mexirim, ve-'atem 'et ha-maslul
 we check.PRTCPL.M.PL ACC the-prices, and-you.M.PL ACC the-itinerary
 'We check the prices, and you (check) the itinerary.'

31. אנחנו בודקים את המחירים, כדי שאתם את המסלול*
 * *'anaxnu bodqim 'et ha-mexirim*
 we check.PRTCPL.M.PL ACC the-prices,
kede še-'atem 'et ha-maslul
 in-order that-you.M.PL ACC the-itinerary
 'We check the prices, in order that you (check) the itinerary.'

E. Comparative ellipsis

The ellipsis of adjectives or adverbs within the complement of comparative prepositions such as *than* or *as* has been called *comparative ellipsis* (Bresnan 1975). The parallel prepositions in Modern Hebrew are *-מ mi-/me-* 'than' and *כמו kmo* 'as'.

32. זהב לבן הוא פחות יקר מפלטינה
zahav lavan hu paḥot yaqar mi-platina
 gold white PRON less expensive than-platinum
 'White gold is less expensive than platinum.'

33. הנסיעה למטולה ארוכה כמו לאילת
ha-nesi'a le-meṭula 'aruka kmo le-'elat
 the-drive.F to-Metulla long.F as to-Eilat
 'The drive to Metulla is as long as to Eilat.'

Typically, *mi-/me-* 'from' in Hebrew is followed by a complementizer, maybe because it cannot be easily attached to other prepositions, being itself a clitic preposition. Perhaps by analogy, *kmo* may also be followed by a complementizer:

34. דני חולם על דינה לעתים יותר קרובות מ*(אשר) על רינה
dani ḫolem 'al dina le-'itim yoter qrovot
 Dani dream.PRTCPL.M.S about Dina at-time.F.PL more close.F.PL
me-(`ašer) 'al rina*
 than *(that) about Rina
 'Dani dreams about Dina more often than about Rina.'

35. לחיות בישראל ב-1970 היה יקר כמו (ש)עכשיו
li-ḫyot be-yisra'el be-1970 haya yaqar kmo (še) 'axšav
 to-live in-Israel in-1970 be.PAST.M.S expensive as (that) now
 'Living in Israel in 1970 was as expensive as now.'

Clearly, a lot of research still needs to be done on the various constructions involving null anaphora and ellipsis in Modern Hebrew. These constructions have so far only been partially mapped, the restrictions governing them have been barely investigated, and the exact difference in their distribution is as yet unknown. A lot of work remains to be done, both descriptively and theoretically.

Edit Doron (The Hebrew University of Jerusalem)

References

- Arregi, Karlos. 2010. "Ellipsis in split questions". *Natural Language and Linguistic Theory* 28: 539-592.
- Borochofsky Bar-Aba, Esther. 2007. "May I some coffee? Nonsentential utterances in colloquial Hebrew". *Hebrew Studies*. 48: 291-316.
- 2008. "Structures with prepositions elided – Semantic and pragmatic motivations". *Adpositions: pragmatic, semantic and syntactic perspectives*, ed. by Dennis Kurzon and Silvia Adler, 67-83. Amsterdam: John Benjamins.
- 2010. *Issues in the study of colloquial Hebrew, its syntax and expression*. (in Hebrew). Jerusalem: The Bialik Institute.
- Bresnan, Joan. 1975. "Comparative deletion and constraints on transformations". *Linguistic Analysis* 1: 25-74.

- Chung, Sandra, William A. Ladusaw and James McCloskey. 1995. "Sluicing and Logical Form". *Natural Language Semantics* 3: 239-282.
- Cole, Peter. 1976. "An apparent asymmetry in the formation of relative clauses in Modern Hebrew". *Studies in Modern Hebrew syntax and semantics*. ed. by Peter Cole. Amsterdam: North Holland Publishing.
- Doron, Edit. 1999. "V-movement and VP Ellipsis". in *Fragments: studies in ellipsis and gapping*, ed. by Shalom Lappin and Elabbas Benmamoun, 124-140. Oxford: Oxford University Press.
- Hankamer, Jorge. 1979. *Deletion in coordinate structure*. New York: Garland.
- Hankamer, Jorge and Ivan Sag. 1976. "Deep and surface anaphora". *Linguistic Inquiry* 7.3: 391-426.
- May, Robert. 1985. *Logical Form: Its structure and derivation*. Cambridge, MA: MIT Press
- Merchant, Jason. 2001. *The syntax of silence: sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.
- Ross, John Robert. 1969. "Guess who". *Papers from the fifth regional meeting of the Chicago Linguistic Society*, ed. by R. I. Binnick, A. Davison, G. Green, and J. Morgan. Chicago, Illinois: University of Chicago.
- . 1970. "Gapping and the order of constituents". *Progress in linguistics*, ed. by Manfred Bierwisch and Karl E. Heidolph, 249–259. The Hague: Mouton.
- Sag, Ivan. 1976. "Deletion and Logical Form". PhD dissertation. MIT.
- Uziel-Karl, Sigal and Ruth A. Berman. 2000. "Where's ellipsis? Whether and why there are missing arguments in Hebrew child language". *Linguistics* 38.3: 457-482.
- Williams, Edwin. 1977. "Discourse and Logical Form". *Linguistic Inquiry* 8:101-139.