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SUBJECT TO CHANGE: AGREEMENT PATTERNS WITH UNACCUSATIVES

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Abstract

In Hebrew, the default word-order is S(ubject)V(erb)O(bject), yet VS order is also allowed in several cases. One of these cases is VS order with verbs whose subject is an internal argument, i.e., passives and unaccusatives (Reinhart & Siloni, 2005; Shlonsky, 1997). In colloquial Hebrew, such VS examples may fail to exhibit ϕ-agreement between the verb and its internal argument: the verb shows default agreement (i.e., 3M.SG) although its subject is feminine or plural (or both). The same lack of ϕ-agreement is impossible in the SV counterpart.

The sole theoretical study put forth to account for this seemingly optional ϕ-agreement in colloquial Hebrew is Preminger (2009). It treats the phenomenon as a case of agreement failure, not agreement optionality. The failure is caused by the presence of an intervener bearing ϕ-features - specifically, a possessive dative - between the verb and its postverbal subject. The phenomenon is taken to support Preminger's view that sentences involving attempted-but-failed agreement are grammatical.

In this thesis, I suggest an alternative model, arguing that an unaccusative construction involving a postverbal subject constitutes an unstable configuration for ϕ-agreement across languages. Arguably, two competing morphological analyses are available to speakers in such a configuration: (i) ϕ-agreement with the postverbal argument (subject); (ii) lack of agreement with the postverbal argument. Analysis (i) entails a nominative subject, while analysis (ii) may lead to the loss of nominative and a different morphological marking of the relevant argument. Initial support for my approach is suggested by (a) attested examples of lack of ϕ-agreement in the absence of a (suitable) intervener; (b) loss of nominative postverbal subject pronouns; and (c) attested examples of postverbal subjects of (some) unacccusatives introduced by the direct object dummy case marker.

Since the empirical domain of investigation belongs to a low register of colloquial Hebrew, authors' intuitions and attested examples are insufficient to obtain a solid empirical basis. Hence, I conducted 3 acceptability judgment experiments to examine the acceptability of lack of agreement with and without intervention, the effect of different types of intervention, and the distribution of the direct object marker with and without ϕ–agreement. The acceptability results reveal that lack of agreement is acceptable in a low register of colloquial Hebrew, and

that intervention improves, but is not required for lack of agreement to occur. Moreover, not only a possessive dative but also an adverb has the same improving effect. In light of that, there is no evidence for Preminger's "failure to agree" approach. The distribution of the direct object marker has turned out to be very limited. The process these VS constructions are undergoing in colloquial Hebrew is reminiscent of the one undergone by Hebrew existential and possessive constructions in the previous century.

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Abbreviations

1 1st person

3 3rd person

SG singular

PL plural

M masculine

F feminine

NOM nominative

DAT dative

ACC accustive

Appl applicative

PASS passive

NEG negation

INF infinitive

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1 Introduction

In various languages that allow both S(ubject)V(erb) and VS word-orders, it has been observed that lack of ϕ-agreement occurred in VS structures but not in SV. This phenomenon has been referred to in the literature as SV-VS asymmetry (Kinjo, 2015; Kobayashi, 2013; Soltan, 2006). One of these languages is Hebrew, whose default word-order is SV(O), yet it allows a VS order in two main cases. One case is the so-called "triggered inversion" (1), which may occur with any type of verb, is licensed by an XP preceding the verb, and by and large appears in written language (high registers). It is commonly analyzed as a Verb Second phenomenon (Shlonsky, 1987, 1990; Shlonsky & Doron, 1992), as schematized in (1).[1] The other case is "untriggered VS order" (2), which does not require any trigger but is limited to verbs whose subject is an internal argument, which is the case of passives and unaccusatives, as the subject remains in its merger position (2) (Reinhart & Siloni, 2005; Shlonsky, 1987, 1997).

(1) etmol halxa ha-yalda la-gan (triggered inversion)
yesterday went-3F.SG the-girl-F.SG to-the-kindergarten
'Yesterday the girl went to the kindergarten'

(2) nigmeru ha-ugi-ot še afiti (untriggered VS order)
ended-3PL the-cookie-F.PL that baked-1SG
'The cookies I baked are over'

In cases of untriggered VS order in Hebrew, the verb and its internal argument may fail to exhibit ϕ-agreement. Thus, we may encounter VS sentences in which the verb has default agreement (i.e., 3M.SG) and its subject is feminine or plural (or both):

(3) nafal le-dina ha-maftex-ot
fell-3M.SG DAT-Dina the-key-M.PL
'Dina's keys fell'

(4) nigmar le-dina ha-ugi-ot
finished-3M.SG DAT-Dina the-cookie-F.PL
'Dina ran out of cookies'

The same lack of ϕ-agreement is impossible in the SV counterparts:

(5) *ha-maftexot nafal (le-dina)
the-key-M.PL fell-3M.SG (DAT-Dina)

[1] See Borer (1995) for a different analysis.

(6) *ha-ugiot nigmar (le-dina)
the-cookie-F.PL finished-3M.SG (DAT-Dina)

It has been suggested that the motivation to choose one order (say, VS) over the other (SV) has to do with the discourse-function of each structure (Auer & Maschler, 2013; Izre'el, 2018; Halevy, 2016; Melnik, 2006). Following work by Cinque (1993), Neeleman and Reinhart (1997) suggest that the choice between alternating word orders has to do with the focus set of each. A focus set is the set of constituents that contain the main stress of the sentence, which by default falls on the most deeply embedded constituent. Each of these constituents may be the focus of the sentence, depending on the context. Alternating word orders differ in their focus sets, as exemplified by scrambled and nonscrambled structures with adverbials in Dutch, S-O-Adv-V and S-Adv-O-V, respectively. In the former, the neutral stress falls on the verb, while in the latter it falls on the object. If we apply this to the SV-VS alternation, in SV structures the default main stress would fall on the verb, while in VS structures it would fall on the subject. Any changes of the focus set require specific discourse conditions, which are not the topic of this paper.

This work focuses on lack of ϕ-agreement in cases of untriggered VS order, mainly with unaccusative verbs. Lack of ϕ-agreement in this configuration in Hebrew, also regarded as "impersonal constructions" or "subjectless constructions", has already been mentioned in the literature (Berman, 1980; Halevy, 2016, 2020; Kuzar, 2002; Melnik, 2002, 2006, 2017; Preminger, 2009; Rosen, 1977, among others). Melnik (2006) discusses lack of ϕ-agreement with unaccusative verbs and states that colloquially, these verbs exhibit impersonal 3M.SG morphology. She provides the following examples, attested in everyday speech, and marks their acceptability as somewhat questionable:

(7) ?niš'ar kama tapux-im
remained-3M.SG some apple-M.PL
'There are some apples left'

(8) ?niš'ar le-dani kama tapux-im
remained-3M.SG DAT-Dani some apple-M.PL
'Dani has some apples left'

Preminger (2009) is the sole work suggesting a theoretical analysis of the possible lack of ϕ–agreement in VS. First, according to Preminger, while lack of ϕ–agreement in VS is rather acceptable in case a possessive dative (*le-dina* in (3-4)) intervenes between the verb and its

subject. it is unacceptable otherwise. Possessive datives are nonselected datives that describe possession in the broad sense, as will be further discussed in section 2. Preminger interprets this difference in acceptability between sentences lacking ϕ-agreement with and without intervention as a grammaticality difference, meaning that it is the intervention of a possessive dative which licenses lack of ϕ-agreement, or in his terms, failure to agree. However, there are rather frequent examples from everyday speech, where the unaccusative verb and its internal argument fail in establishing a ϕ-agreement relation even in the absence of an intervening possessive dative, as illustrated by the attested examples (7) above and (9-10) below. The existence of such examples casts some doubt on Preminger's claim.

(9) nigmar ha-tut-im
ended-3M.SG the-strawberry-M.PL
'There are no more strawberries'

(10) šama hitxil ha-hadbaka ha-gdola
there began-3M.SG the-contagion-F.SG the-large-F.SG
'There the large-scale contagion began'

Another related phenomenon is that in some cases of default agreement, the internal argument appears with the definite direct object marker (accusative case marker) *et*, when definite, just like direct objects. This is illustrated by the attested (11-12).

(11) hofi'a li et ha-mila ha-zot ba-milon
appeared-3M.SG DAT-me ACC the-word-F.SG the-this-F.SG in-the-dictionary
'This word appeared in the dictionary'

(12) nišar li et ha-sfaton-im ha-regil-im
remained-3M.SG DAT-me ACC the-lipstick-M.PL the-regular-M.PL
'The regular lipsticks remained'

In light of that, the following questions arise:

I) Intervention: Lack of ϕ-agreement with unaccusatives in VS order is attested in corpora even without intervention. To which extent is the intervention required for lack of ϕ-agreement? Can the acceptability difference between lack of ϕ-agreement with and without intervention arising from informal judgments, be corroborated by experiments?

Should this difference sensed by speakers be interpreted as difference in grammaticality, as argued by Preminger? What is the nature of this intervention?

II) Accusative/Direct object marker: How frequent is the phenomenon? How should examples such as (11-12) be analyzed? That is, what licenses a direct object marker introducing the post-verbal argument?

Answering these questions can provide us with a better understanding of the behavior of agreement, case and unaccusative verbs in natural language.

In my thesis, I will attempt to answer the questions above. On the basis of authors' intuitions and attested examples, the grammatical status of the relevant data remains unclear, as discussed above, possibly due to the low register examined. I therefore carried out experiments on a large number of speakers in order to obtain solid data. Experiment 1 examined the acceptability of sentences with a clause-initial unaccusative verb failing to agree with its post-verbal argument in number and/or gender, with and without an intervening possessive dative. Experiment 2 investigated the effect of the type of intervention, comparing examples with no intervention to examples involving three different types of intervention: a possessive dative, an adverb and a quantifier. Similarly, Experiment 3 tested the effects of pronominal intervention on lack of agreement. Finally, to test the distribution of the direct object marker, Experiment 4 examined its acceptability with and without ϕ-agreement.

This work is structured as follows. Section 2 sets the stage, discussing the possessive dative and its relevance to lack of ϕ-agreement. The three subsequent sections report the results of the first three experiments I conducted. Section 3 presents Experiment 1, which examined the acceptability of three types of ϕ-relations with and without the intervention of a possessive dative. Section 4 presents Experiment 2, which investigated the effect of the type of intervention, comparing sentences with no intervention to sentences involving three different types of intervention. Section 5 presents Experiment 3, which tested the effects of pronominal intervention. In section 6 I state my hypotheses and put forth my proposal. In section 7 I present Experiment 4, which examined the acceptability of the direct object marker within agreement and lack of agreement sentences. Finally, in section 8 I conclude with a general discussion. The appendices elaborate on the distinction between unaccusatives and unergatives, reporting

an additional experiment I ran, and provide the stimuli used in the experiments.

2 The possessive dative and its relevance to untriggered VS

Possessive datives are optional datives describing possession in the broad sense. They can express ownership, authorship, responsibility etc., over an internal argument, but not an external one (Borer & Grodzinsky, 1986). [2] Hence, in (13), where the verb is unaccusative, Dan can be either the owner of the robot, the one who built it, or the one who borrowed it. However, in (14), where the verb is unergative, the interpretation of Dan as the possessor of the robot is unavailable.

(13) ha-robot neheras le-dan
the-robot-M.SG got-destroyed-3M.SG DAT-Dan
'Dan's robot got destroyed'

(14) *ha-robot hita'teš le-dan
the-robot-M.SG sneezed-3M.SG DAT-Dan
'The robot sneezed (to Dan)'

Borer & Grodzinsky argue that the dative has to c-command the noun phrase or its trace in order to serve as its possessor. Further, it has also been argued that the possessor in this possessive construction is somewhat affected by the event denoted by the verb (Berman, 1982; Landau, 1999). Thus, in (13), the fact that the robot got destroyed had some effect on Dan. This will not play a role in what follows.

Preminger (2009) claims that lack of ϕ-agreement between a verb and its post-verbal subject is tolerated in untriggered VS only with (non-thematic) possessive datives. Thus, according to Preminger, (3-4) and (8) above as well as (16b) below would be grammatical, yet (7) and (16c-16d) would be ungrammatical. He further emphasizes that ϕ-agreement is not optional. If it were optional, he argues, we would expect lack of ϕ-agreement to be tolerated in all 'verb internal argument subject' configurations, but it is not. Preminger provides examples with passives of ditransitive verbs taking an argumental dative ((15b-15c) vs. (15a)) and unaccusatives without dative intervention ((16c-16d) vs. (16a)), which he marks as ungrammatical:

[2] The internality of the possessee is a necessary condition for the dative possessor construction but not a sufficient one (see Landau, 1999 for details). This will not be further discussed in the paper.

(15) a. nimsera la-mefakeax ha-ma'atafa
PASS-handed-3F.SG DAT-the-supervisor-M.SG the-envelope-F.SG
'The envelope was handed to the supervisor'

b. *nimsar la-mefakeax ha-ma'atafa
PASS-handed-3M.SG DAT-the-supervisor-M.SG the-envelope-F.SG

c. *nimsar la-mefakeax ha-maftex-ot
PASS-handed-3M.SG DAT-the-supervisor-M.SG the-key-M.PL

(16) a. nafla (le-dina) ha-cincenet
fell-3F.SG (DAT-Dina) the-jar-F.SG
'The(/Dina's) jar fell'

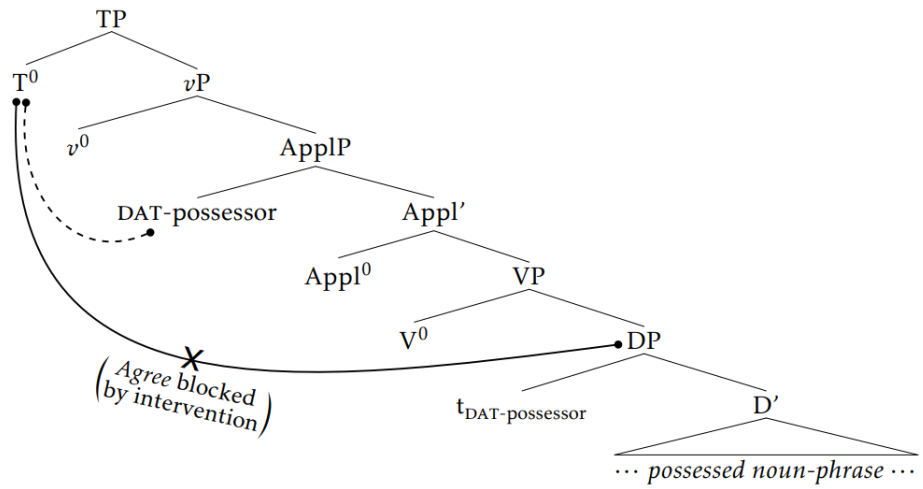
b. nafal le-dina ha-cincenet
fell-3M.SG DAT-Dina the-jar-F.SG

c. *nafal ha-cincenet
fell-3M.SG the-jar-F.SG

d. *nafal ha-maftex-ot
fell-3M.SG the-key-M.PL

Preminger suggests that what allows the failure of ϕ-agreement between the verb and the internal argument is the intervention of a possessive dative, and assumes the following structure for possessive dative constructions:

(17) Intervention in possessive dative constructions



Since the possessive dative is in the minimal search domain of T^0, but not of the possessed DP as the possessive dative c-commands the DP but not vice versa, the possessive dative intervenes

in the DP's probe-goal relations with T^0, and allows for ϕ-agreement failure. It is important to note that the failure to establish ϕ-agreement, supposedly caused by intervention, is not agreement with the dative. As exemplified in (18) below, the possessive dative does not transfer its ϕ-features to the probe:

(18) *nafla le-dina ha-sfar-im
fell-3F.SG DAT-Dina the-book-M.PL
'Dina's books fell'

Moreover, it cannot be regarded as a performance error, since the occurrence of this lack of agreement is systematic, which sets it apart from sporadic errors (Corder, 1967).

Two questions remain: (i) Why is ϕ-agreement nonetheless possible despite the intervention of the possessive dative (16a)? Recall Preminger does not assume that ϕ-agreement is optional given the ungrammaticaility of (16c-16d). (ii) Why is ϕ-agreement failure impossible with the passive of ditransitives where the dative argument (goal) intervenes between the verb and its postverbal subject (15b-15c)?

Let us start with the second question. Preminger assumes the principle of equidistance (Chomsky, 1995, 2000; Collins, 1997), which states that DPs in the same minimal domain, specifically in our case in the specifier and complement positions of the same head (V), do not constitute interveners to one another. Since the two internal arguments of ditransitive verbs are both in the minimal domain of the same head, ϕ-agreement failure between the verb and the subject DP is not allowed. As for the first question – why is ϕ-agreement possible despite the intervention (16a)? – Preminger suggests that in these cases the postverbal subject moves up (covertly) to a position higher than the possessive dative, where the latter no longer intervenes, but lower than the probe. Hence, ϕ-agreement is possible. [3] In sum, according to Preminger, the syntactic intervention of the possessive dative is necessary for lack of ϕ-agreement to be possible.

[3] Sentences with overt movement of the postverbal subject are at best marginal, and have not been attested even with verb-subject agreement:

(19) */??naflu ha-maftex-ot le-dina
fell-3PL the-key-M.PL DAT-Dina
'Dina's keys fell'

Therefore, the motivation to assume such covert movement is unclear.

However, as already mentioned in the introduction, there is a non-negligible amount of examples, attested on websites and in everyday speech, where lack of ϕ-agreement occurs without intervention (20-22).

(20) nigmar ha-hastara
ended-3M.SG the-hiding-F.SG
'No more hiding'

(21) matxil ha-nisu'im nigmar ha-ahava
starts-3M.SG the-marriage-M.PL ends-3M.SG the-love-F.SG
'When marriage begins, love ends' (Kuzar, 2002)

(22) lo nišar mayim xam-im
NEG remained-3M.SG water-M.PL hot-M.PL
'There is no more hot water'

Further, there are also cases where the intervention seems to be linear rather than structural. This is illustrated in examples (23-25), where the element (a quantifier) following the verb linearly – not structurally (as it is dominated by the DP subject) – intervenes between the verb and head noun.

(23) nišpax harbe mayim
spilt-3M.SG a-lot-of water-M.PL
'A lot of water was spilt'

(24) nišar kama mid-ot axron-ot
remained-3M.SG a-few size-F.PL last-F.PL
'There are last few sizes left'

(25) nocar hamon balagan-im
PASS-created-3M.SG a-lot-of mess-M.PL
'A lot of mess was created'

Finally, in (26-28), an adverb intervenes between the verb and its postverbal subject.

(26) ve-az nocar be'ecem nefila
and-then PASS-created-3M.SG in.fact fall-F.SG
'And then there is a fall'

(27) ad še-higia pitom averat bam
until that-arrived-3M.SG suddently violation-F.SG information security
'Until there was found an information security violation all of the sudden'

(28) ala ba-post tluna al-ha-mexir-im
arose-3M.SG in-the-post complaint-F.SG on-the-price-M.PL
'A complaint about the prices arose in the post'

Clearly, there is a discrepancy between the occurrence of examples such as (20-28) as well as (7), (9-10) in corpora and Preminger's observations. The empirical array associated with lack of ϕ-agreement is not very clear, most probably due to the low register of colloquial Hebrew that the phenomenon occurs in. Is lack of ϕ-agreement only possible with intervention? And if it is, what is the nature of the required intervention? Is it structural or linear? In order to answer these questions, I conducted three experiments. Experiment 1 examines the acceptability ratings of sentences with untriggered VS order with no ϕ-agreement between the verb and its subject, with and without intervention. Experiment 2 compares three types of interveners: possessive datives, adverbs and quantifiers in a Singular-Plural configuration, compared to sentences without intervention. Finally, Experiment 3 tests the effect of pronominal intervention.

Before turning to the experiments, a few words on grammaticality and acceptability are in order. Following Keller (2000), I assume that grammaticality is binary, meaning that sentences can be either grammatical or ungrammatical. Acceptability, on the other hand, is graded, so both grammatical and ungrammatical sentences may have varying degrees of acceptability. The factors that may cause this variance are presumed to be extra-grammatical, e.g., plausibility, frequency, working memory limitations, etc. (Keller, 2000; Sorace & Keller, 2005; Sprouse, 2007). Since the experiments examine a phenomenon that belongs to a low register of colloquial Hebrew and goes bluntly against the normative rules, high acceptability ratings for sentences exhibiting lack of ϕ-agreement is not expected. Nonetheless, significant differences between the different conditions could shed light on the data.

3 Experiment 1

Experiment 1 examined the acceptability of sentences where the verb is singular and the subject plural (henceforth: Singular-Plural) and compared it to the acceptability of sentences where the verb and the subject are both plural (grammatical baseline), and sentences where the verb is plural and the subject singular (ungrammatical baseline). These three conditions are examined

with and without the intervention of a possessive dative. Our predictions were as follows. The Agreement condition was predicted to be acceptable across the board (this is the grammatical baseline) and significantly better than the other conditions given its normative status and occurrence in all registers of Hebrew. The Plural-Singular condition was predicted to be unacceptable across the board (the ungrammatical baseline). Predictions diverged regarding the Singular-Plural condition. If Preminger is right and lack of ϕ-agreement is licensed by intervention, specifically, by a possessive dative intervener, then Singular-Plural sentences would be more acceptable than the ungrammatical baseline only with intervention, but not without. However, based on corpus examples, Singular-Plural sentences are predicted to be more acceptable than the ungrammatical baseline independently of intervention.

3.1 Method

3.1.1 Participants

42 adults aged 22-53 (mean age = 30.9) participated in the study. All participants were monolingual native speakers of Hebrew with no linguistic education.

3.1.2 Materials

The experiment tested the acceptability of three types of ϕ-relations between the verb and its post-verbal subject: plural agreement (Agreement), lack of agreement so that the verb was singular but the subject plural (Singular-Plural), and vice versa, the verb was plural and the subject singular (Plural-Singular). The three ϕ-relation types were crossed with the 'intervention' variable: presence vs. absence of an intervener (with intervention vs. without intervention) between the verb and its internal argument. This yielded a total of six conditions: Agreement without intervention (29a), Agreement with intervention (29b), Singular-Plural without intervention (29c), Singular-Plural with intervention (29d), Plural-Singular without intervention (29e), and Plural-Singular with intervention (29f).

(29) a. naflu ha-maftex-ot ba-sedek
fell-3PL the-key-M.PL in-the-crack
'The keys fell in the crack'

b. naflu le-dan ha-maftex-ot ba-sedek
fell-3PL DAT-Dan the-key-M.PL in-the-crack
'Dan's keys fell in the crack'

c. ?nafal ha-maftex-ot ba-sedek
fell-3M.SG the-key-M.PL in-the-crack

d. ?nafal le-dan ha-maftex-ot ba-sedek
fell-3M.SG DAT-Dan the-key-M.PL in-the-crack

e. *naflu ha-mafteax ba-sedek
fell-3PL the-key-M.SG in-the-crack

f. *naflu le-dan ha-mafteax ba-sedek
fell-3PL DAT-Dan the-key-M.SG in-the-crack

The unaccusative verbs used in the experiment were chosen based on the following diagnostics:

(30) The characteristics of unaccusative verbs:

a. The verb occurs in the untriggered VS word-order (Siloni, 2012).

b. The verb allows a possessive dative (Borer & Grodzinsky, 1986; Brandel & Siloni, to appear; Meltzer-Asscher & Siloni, 2012).

c. The verb has a transitive counterpart whose external argument has a Cause role (i.e. an argument unspecified regarding mental state) (Reinhart, 2002).

Two passives were included in the experiment.[4]

Eighteen sets of experimental items, each including six conditions were construed. Items were distributed into six lists in a Latin-square design, and participants were evenly assigned to lists. Each list contained a total of fifty-four sentences: eighteen experimental items and thirty-six filler items. The filler items differed from the experimental items in their syntactic structure, and had different levels of acceptability. There were 12 filler sentences that were completely acceptable (e.g., *dibarti im dina etmol* 'I talked to Dina yesterday'), 12 filler sentences whose acceptability was questionable (due to the position of the adverb, e.g., *?hašaršeret be-pit'omiut nigneva etmol* 'The necklace suddenly was stolen yesterday') and 12 completely unacceptable filler sentences (due to their null subject in third person, which is impossible in Hebrew. E.g.,

[4]These passive instances occur in low registers of Hebrew. More generally, the Hebrew passive mostly belongs to higher registers, where lack of ϕ-agreement between verb and subject is disallowed. Hence, passive verbs were not included in the subsequent experiments.

**taram le-David sfarim be-yanuar* 'Donated books to David in January'). Each participant was presented with one experimental sentence of each set, thus being exposed to 3 sentences of each condition. The sentences were presented in pseudo-randomized orders, such that there were at least 2 filler items between the experimental items. the experiment was conducted using the Ibex Farm web platform (Zehr & Schwarz, 2018).

3.1.3 Procedure

A link to the experiment was posted on social media and sent to potential participants individually. First, participants were asked to fill in some demographic information and consent to participate. They were instructed to rate the sentences to be presented on the screen on a scale of 1 ("unnatural") to 7 ("natural"), ignoring the prescriptive rules of Hebrew taught in school, and decide whether a sentence is acceptable (natural) in everyday speech according to their intuitions as native speakers. Participants were provided with an example of a natural sentence (*ra'iti xatul lavan* 'I saw a white cat') and an unnatural sentence (**ra'iti lavan xatul* 'I saw a cat white'). After being presented with a grammatical practice sentence, the experiment began.

3.2 Results

The participants' acceptability ratings were collected and analyzed as presented in Table 1 and Figure 1 below.

Table 1: Mean acceptability ratings and standard deviation of Agreement, Singular-Plural and Plural-Singular conditions, with and without intervention

	Mean(SD)		
Condition	Agreement	Singular-Plural	Plural-Singular
with intervention	6(1.49)	2.86(1.77)	1.63(0.95)
without intervention	5.87(1.53)	2.04(1.41)	1.51(0.92)

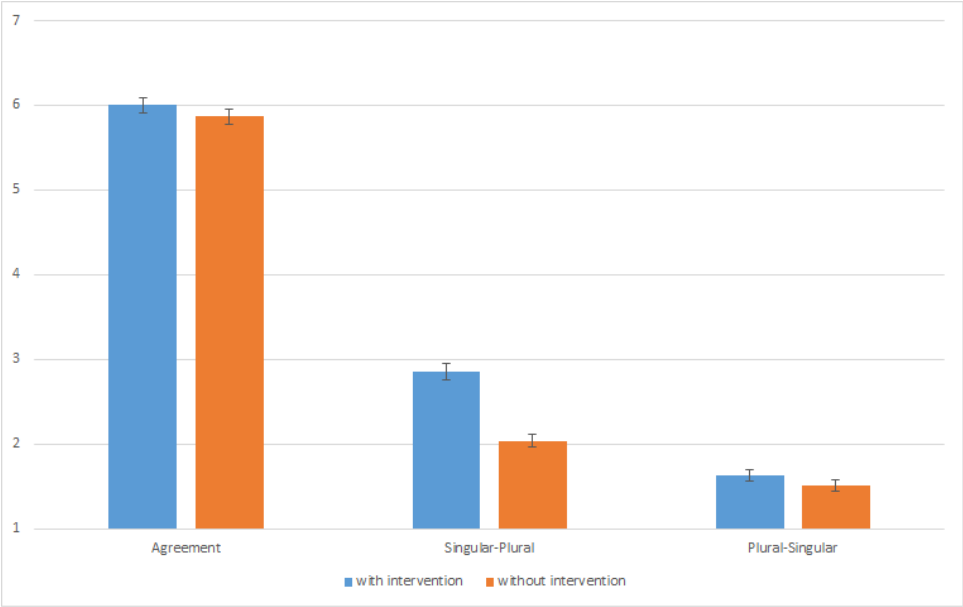


Figure 1: Mean acceptability ratings of Agreement, Singular-Plural and Plural-Singular conditions, with and without intervention (Error bars represent ±1 standard error) * p<0.001.

A two-way repeated measures ANOVA revealed a significant main effect for ϕ-relations by participants (F1(2,82) = 585.507, $p < 0.001$) and by items (F2(2,34) = 421.795, $p < 0.001$). Two-tailed paired t-tests (Bonferroni-corrected for multiple comparisons) revealed that the Agreement condition was judged as significantly more natural than the Singular-Plural condition by participants (t(41) = 18.282, $p < 0.001$) and by items (t(17) = 17.811, $p < 0.001$). The Agreement condition was also significantly more natural than Plural-Singular condition by participants (t(41) = 26.607, $p < 0.001$) and by items (t(17) = 22.598, $p < 0.001$). In addition, the Singular-Plural condition was judged as significantly more natural than the Plural-Singular condition by participants (t(41) = 5.596, $p < 0.001$) and by items (t(17) = 10.925, $p < 0.001$).

A two-way repeated measures ANOVA also found a significant main effect for Intervention by participants (F1(1,41) = 15.643, $p < 0.001$) and by items (F2(1,17) = 25.072, $p < 0.001$), such that the sentences with intervention were judged as more natural than those without intervention. These effects were qualified by a significant interaction between ϕ-relations and Intervention by participants (F1(2,82) = 8,122, $p < 0.001$) and by items (F2(2,34) = 5.414, p = 0.016).

Paired two-tailed t-tests revealed that the Singular-Plural condition with intervention was significantly more natural than the one without intervention by participants (t(41) = 5.599, p

< 0.001) and by items ($t(17) = 3.656$, $p = 0.002$). The difference between the Agreement conditions with and without intervention was not significant by participants ($t(41) = 0.855$, $p = 0.398$) and by items ($t(17) = 0.817$, $p = 0.425$). Similarly, the difference between the Plural-Singular conditions with and without intervention was not significant by participants ($t(41) = 1.138$, $p = 0.262$) and by items ($t(17) = 1.019$, $p = 0.322$).

A paired two-tailed t-test revealed that the Singular-Plural condition without intervention was judged as significantly more natural than the Plural-Singular condition without intervention by participants ($t(41) = 3.309$, $p = 0.002$) and by items ($t(17) = 4.242$, $p < 0.001$).

3.3 Discussion

The Agreement condition was found to be significantly more acceptable than the Singular-Plural and Plural-Singular conditions. This was expected given that the former is grammatical in all registers of Hebrew (high and low), while the Singular-Plural condition is confined to low registers of colloquial Hebrew, and Plural-Singular sentences are ungrammatical (and unattested). Further, the normative rule prescribing agreement between verbs and their subject has probably affected participants, as expected, despite the experiment's instructions to ignore grammar rules taught in school. Importantly, despite its low average, the Singular-Plural condition was judged as significantly more natural than the Plural-Singular condition. This reflects the occurrence of Singular-Plural sentences in colloquial Hebrew and the absence of Plural-Singular sentences in all registers. The fact that Singular-Plural sentences were ranked low (with or without intervention) stems from the fact that they belong to a low register, and normative Hebrew disallows them. Again, even though participants were instructed to ignore rules of normative Hebrew, such rules may still have affected them; Singular-Plural sentences may be perceived as "bad Hebrew", despite their use in colloquial language. Furthermore, that these colloquial sentences were tested written may have had an effect too; had the acceptability judgement task been oral, participants may have been more inclined to accept them, given the register they belong to.

Intervention significantly improves the acceptability of the Singular-Plural condition, but not that of the Agreement or Plural-Singular conditions. That is, intervention is irrelevant for the grammatical and ungrammatical baselines, and significantly affects the Singular-Plural con-

dition exclusively. In addition, the Singular-Plural condition without intervention was significantly more natural than the Plural-Singular condition without intervention.

Thus, as argued by Preminger, intervention of a possessive dative clearly improves lack of ϕ-agreement (the Singular-Plural condition). But still, even the no-intervention condition was judged as significantly more acceptable than the ungrammatical baseline (the Plural-Singular condition) without intervention. We surmise that Singular-Plural sentences are grammatical in certain low registers of Hebrew, and that intervention clearly improves them. In order to better understand the phenomenon of intervention, we ran Experiment 2. the experiment tested the acceptability of Singular-Plural sentences with other intervening elements: adverbs and quantifiers. These were compared to Singular-Plural sentences with possessive dative intervention and without intervention.

4 Experiment 2

Experiment 2 tested the acceptability of sentences with three types of interveners: possessive datives, adverbs and quantifiers. These sentences were compared to sentences without intervention. Participants were divided into two groups: the first group was exposed to the four types of intervention within Singular-Plural sentences, while the second group was exposed to the same conditions within Agreement sentences. The second group served as a control group. Neutralizing the agreement factor enabled us to examine whether all three interveners were equally acceptable in the position between the verb and its subject.

Since quantifiers are dominated by the postverbal subject DP, they do not constitute structural intervention for ϕ-relations between the verb and its postverbal subject. Adverbs are DP external, possibly outside the VP minimal domain, yet as opposed to possessive datives, they do not seem to have accessible ϕ-features. Thus, under Preminger's approach, neither condition was predicted to allow ϕ-relations failure between T and the subject DP. In contrast, based on corpus examples, we predicted that there would be no significant difference between the different interveners.

4.1 Method

4.1.1 Participants

The first group consisted of 104 adults aged 20-39 (mean age = 27.8) and the second group consisted of 104 adults aged 18-38 (mean age = 26.3). All participants were monolingual native speakers of Hebrew with no linguistic education.

4.1.2 Materials

The materials for the first group incorporated the four different intervention conditions in Singular-Plural sentences and for the second group in Agreement sentences. The four conditions were as follows: possessive dative intervention (31a), quantifier intervention (31b), adverb intervention (31c), and no intervention (31d).

(31) a. ne'elam/ne'elmu le-yosi dvar-im me-ha-mizvada
disappeared-3M.SG/3PL DAT-Yosi thing-M.PL from-the-suitcase
'Yosi's stuff disappeared from the suitcase'

b. ne'elam/ne'elmu harbe dvar-im me-ha-mizvada
disappeared-3M.SG/3PL a-lot-of thing-M.PL from-the-suitcase
'A lot of stuff disappeared from the suitcase'

c. ne'elam/ne'elmu etmol dvar-im me-ha-mizvada
disappeared-3M.SG/3PL yesterday thing-M.PL from-the-suitcase
'Yesterday stuff disappeared from the suitcase'

d. ne'elam/ne'elmu dvar-im me-ha-mizvada
disappeared-3M.SG/3PL thing-M.PL from-the-suitcase
'Some stuff disappeared from the suitcase'

All verbs were unaccusative verbs, classified as such according to the characteristics stated in (30) above. The quantifiers were such that could not trigger singular agreement with the verb when modifying a plural head noun (see Danon, 2013).[5] As for the internal arguments, none of them had a mass reading (e.g., noun phrases denoting food), since mass nouns license singular agreement.

[5]The quantifiers were equally divided to quantifiers that are limited to count nouns, and quantifiers that are neutral in terms of countability. The adverbs were also equally divided to adverbs of manner and adverbs of time.

There were twelve sets of experimental items, each consisting of four conditions. The items were divided into four lists in a Latin-square design, and participants were evenly assigned to lists. Each list contained a total of thirty-six sentences: twelve experimental items and twenty-four fillers of differing acceptability, all belonging to colloquial Hebrew, so that the experimental items would not be judged as significantly less acceptable than the fillers. Each participant was presented with one experimental item of each set, thus being exposed to 3 sentences of each condition. The sentences were presented in pseudo-randomized orders, such that there were at least 2 filler items between the experimental items. the experiment was conducted using the Ibex Farm web platform (Zehr & Schwarz, 2018).

4.1.3 Procedure

The procedure was identical to that of Experiment 1.

4.2 Results

Table 2: Mean acceptability ratings and standard deviation of quantifier, adverb and possessive dative intervention and no intervention conditions within Agreement and Singular-Plural sentences

	Mean(SD)			
Condition	Possessive dative	Adverb	Quantifier	No intervention
Singular-Plural	3.86(1.83)	3.02(1.85)	2.96(1.79)	2.8(1.77)
Agreement	6.14(0.12)	5.52(0.15)	6.07(0.14)	6.25(0.11)

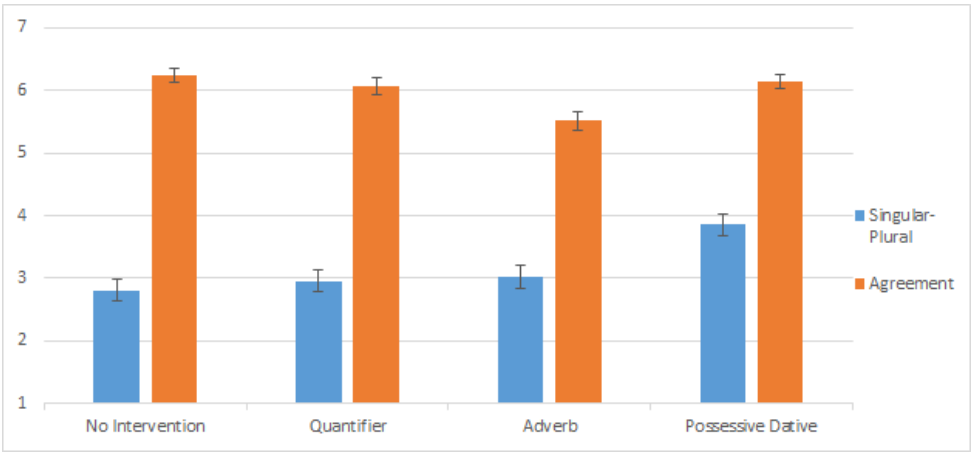


Figure 2: Mean acceptability ratings of quantifier, adverb and possessive dative intervention and no intervention conditions within Agreement and Singular-Plural sentences (Error bars represent ±1 standard error).

A linear mixed model fit by REML using Satterthwaite's method found a significant main effect for Intervention ($\chi^2(3) = 89.879$, $p < 0.001$) and Agreement Type ($\chi^2(1) = 2081.921$, $p < 0.001$). Moreover, a significant interaction between Intervention and Agreement Type was found ($\chi^2(3) = 22.915$, $p < 0.001$).

Post hoc analyses with Bonferroni adjustment showed that within Singular-Plural sentences, the possessive dative condition was significantly more acceptable than all other conditions: the adverb condition ($p < 0.001$), the quantifier condition ($p < 0.001$), and no intervention ($p < 0.001$). Other comparisons were non-significant. Within Agreement sentences, the adverb condition was significantly less acceptable than all other conditions: the possessive dative condition ($p < 0.001$), the quantifier condition ($p < 0.001$), and no intervention ($p < 0.001$). Other comparisons were non-significant.

However, Agreement Type does not moderate the rating of sentences with adverb intervention. This means that there is no significant difference between the adverb condition and the possessive dative condition within Agreement sentences and within Singular-Plural sentences ($t(2357.83) = 1.336$, $p = 0.182$).

4.3 Discussion

Within Singular-Plural sentences, the possessive dative was found to be significantly more acceptable than all other conditions; no other significant comparisons were found. Within Agreement sentences, the adverb condition was significantly less acceptable than all other conditions, and other comparisons were non-significant. However, the results of the regression show that the difference between the adverb condition and the possessive dative condition in Singular-Plural sentences and in Agreement sentences is non-significant. This means that the lower rating the adverb condition got in comparison to the possessive dative condition in Singular-Plural sentences does not stem from lack of agreement, as it got a parallel low rating also with agreement. That is, the reason why the adverb condition is significantly lower than the possessive dative condition must follow for the word order: the verb-adverb-subject order is judged as less acceptable than the verb-possessive-dative-subject order independently of the agreement factor. This means that not only possessive datives but also adverbs improve lack of agreement

between the verb and its postverbal subject in comparison to the quantifier condition and the no intervention condition[6], again, since the difference between them in Singular-Plural sentences is not caused by the lack of agreement. This result is not in line with Preminger's "failure to agree", since adverbs do not have accessible ϕ-features that can intervene in the ϕ-relations of the verb and its postverbal subject. In section 6 I will suggest an explanation for the improvement in acceptability of the possessive dative and adverb conditions and put forward the account I suggest to pursue. Beforehand, I present Experiment 3, which aimed to confirm the findings of Experiment 2 in the pronominal domain, by examining the effect of intervention of pronominal adverbial locatives versus pronominal datives.

5 Experiment 3

Experiment 3 tested the acceptability of two types of ϕ-relations, Agreement and Singular-Plural with two types of intervention: pronominal dative intervention and pronominal locative (adverb) intervention. Based on the results of Experiment 2, we predicted that the dative intervention condition would be more acceptable than the locative intervention condition, since adverbs have turned out to be less acceptable in the position between the verb and the postverbal subject.

5.1 Method

5.1.1 Participants

32 adults aged 19-29 (mean age = 24.9), all monolingual native speakers of Hebrew, participated in the study.

5.1.2 Materials

The design of the experiment was a 2x2, with the factors ϕ-relations (Agreement/Singular-Plural) and Intervener (Dative/Locative). This yielded a total of four conditions: Agreement-

[6]It should be noted that some quantifiers, although constituting linear intervention between the verb and the head noun, may themselves hint that the DP is plural, and are thus similar to the no intervention condition.

Dative (32a), Agreement-Locative (32b), Singular-Plural-Dative (32c) and Singular-Plural-Locative (32d).

(32) a. nigmeru l-anu ha-kartis-im
finished-3PL DAT-us the-ticket-M.PL
'We are out of tickets'

b. nigmeru po ha-kartis-im
finished-3PL here the-ticket-M.PL
'The tickets are sold out'

c. nigmar l-anu ha-kartis-im
finished-3M.SG DAT-us the-ticket-M.PL

d. nigmar po ha-kartis-im
finished-3M.SG here the-ticket-M.PL

All verbs were unaccusative verbs, classified as such according to the characteristics stated in (30) above. There were twelve sets of experimental items and twenty-four fillers ordered as in Experiment 2.

5.1.3 Procedure

The procedure was identical to that of Experiment 1.

5.2 Results

Table 3: Mean acceptability ratings and standard deviation of Agreement and Singular-Plural sentences with pronominal dative and pronominal locative intervention.

Mean(SD)			
Agreement dative	Agreement locative	Singular-Plural dative	Singular-Plural locative
6.41(0.2)	5.64(0.29)	3.01(0.3)	2.6(0.27)

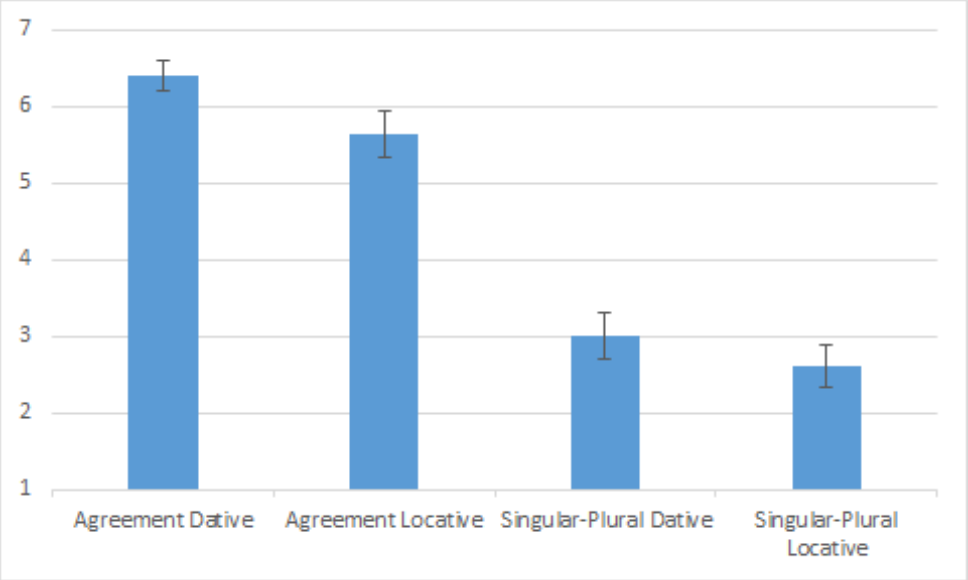


Figure 3: Mean acceptability ratings and standard deviation of Agreement and Singular-Plural sentences with pronominal dative and pronominal locative intervention (Error bars represent ±1 standard error).

A two-way repeated measures ANOVA found no significant interaction but showed a significant main effect for agreement by participants ($F1(1,31) = 332.105$, $p < 0.001$) and by items ($F2(1,11) = 267.423$, $p < 0.001$), and for intervention type by participants ($F1(1,31) = 9.315$, $p = 0.005$) and by items ($F2(1,11) = 15.383$, $p = 0.002$).

5.3 Discussion

The lack of interaction between agreement type and intervention type aligns with our predictions and reinforces the findings of Experiment 2: the locative condition is less acceptable than the dative condition regardless of agreement. This further emphasizes that the difference between datives and locatives/adverbs stems from the word order – a locative is less acceptable in the position between the verb and its postverbal subject compared to a dative. The results of experiments 2-3 do not support Preminger's "failure to agree" approach, since lacking ϕ–features, adverbs do not form intervention in the ϕ–relations between the verb and its postverbal subject.

In the next section I put forth my account of the phenomenon of lack of ϕ-relations in untriggered VS, as well as suggest an explanation for the improvement in acceptability prompted by the possessive dative and adverb conditions observed in experiments 2-3.

6 Proposal

I suggest that in colloquial Hebrew, the process described in (33) and explained directly is taking place:

(33) a. Loss of ϕ–agreement in untriggered verb-subject order

b. Loss of nominative case on the postverbal subject

c. Insertion of the direct object marker, alias accusative marker, to introduce the postverbal subject.

Notice first that crosslinguistically 'unaccusative verb subject' order constitutes a configuration that is a priori equivocal with regard to the ϕ–agreement options it can instantiate. Thus, for instance, in English expletive constructions with an unaccusative verb are not very common, but when they do occur, the verb has to agree with its postverbal subject:

(34) There exist some options

(35) Now there arise two subcases

Nevertheless, lack of agreement is attested in colloquial English within the parallel existential constructions:

(36) There is games other than Pokémon GO

(37) We don't know if there is multiple "Charmers" in the back

In contrast, in French, the unaccusative verb never agrees with its postverbal argument, but rather shows agreement with the preverbal expletive (38). In SV constructions, agreement with the subject is obligatory (40).

(38) Il est arrivé trois graçons
it is arrived-M.SG three boy-M.PL
'Three boys have arrived'

(39) *Il sont arrivés trois garçons
it are arrived-M.PL three boy-M.PL

(40) Trois garçons sont arrivés
three boy-M.PL are arrived-M.PL

In Portuguese and Italian, which do not exhibit an expletive, the verb normally agrees with its postverbal subject (41-42). However, some examples of lack of agreement can be found in Brazilian Portuguese (43-44) and Tuscan Italian (45-46) (Nocentini, 1999)[7]:

(41) Apareceram esses dois tipos (Portuguese)
appeared-3PL these-M two-M guy-M.PL
'These two guys appeared'

(42) Sono arrivate le ragazze (Italian)
are arrived-F.PL the-F.PL girl-F.PL
'The girls have arrived'

(43) Recentemente apareceu os livros para colorir para adultos
recently appeared-3SG the-M.PL book-M.PL for color-INF for adult-PL
'Recently coloring books for adults appeared'

(44) É que nasceu os gêmeos Eva e Mateo
is that was-born-3SG the-M.PL twin-M.PL Eva and Mateo
'The twins Eva and Mateo were born'

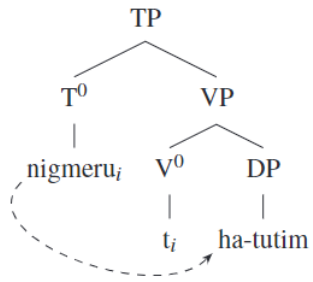
(45) Con quest'umido nasce i funghi
with this-humid be-born-3SG the-M.PL mushroom-M.PL
'Mushrooms grow with this humidity'

(46) Stasera viene le tue amiche a trovarti?
tonight comes-3SG the-F.PL your-F.PL friend-F.PL to find-you
'Are your girlfriends coming to see you tonight?'

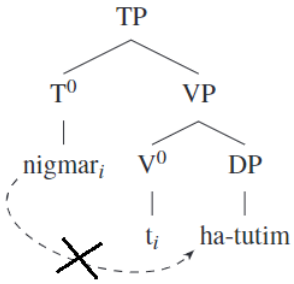
This crosslinguistic variation suggests that 'unaccusative verb subject' order is an 'instable' configuration as far as ϕ–agreement between the verb and its subject is concerned. This seems to result from the internal argument status of the subject, which informally speaking can be analyzed as a 'subject' or a 'direct object'. A priori, this VS configuration allows for two underlying agreement construals: (i) agreement with the postverbal subject (47); (ii) lack of agreement with the postverbal argument, resulting in default agreement (48). Arguably, the verb's default-agreement is an instantiation of Spec-head agreement with an expletive *pro* (I leave here open the question whether Spec-head agreement is a meaningful structural relation).

[7] I would like to thank Prof. Jonathan David Bobaljik (p.c.) for referring me to these examples.

(47) Structural representation of (9) with agreement

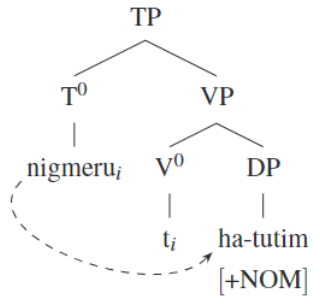


(48) Structural representation of (9) without agreement

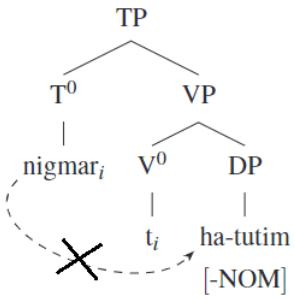


Lack of agreement with the postverbal subject (construal (ii)) may lead to loss of nominative case on the subject. That is, lack of ϕ–agreement between the verb and its subject in a language regularly exhibiting subject-verb agreement may lead speakers to analyze the postverbal subject as lacking nominative case, given that nominative is by and large morphologically unmarked.

(49) Structural representation of (9) with agreement (case marking)



(50) Structural representation of (9) without agreement (case marking)



Furthermore, in Hebrew an independent process of disappearance of postverbal pronominal subjects has taken place. In earlier stages of Hebrew (and most dominantly in Biblical Hebrew), pronominal subjects could appear postverbally and were always nominative. Later on, these postverbal pronouns started disappearing, and nowadays pronouns appear virtually preverbally.[8] Thus, in Modern Hebrew, pronominal subjects (as well as demonstratives) in internal argument position cannot appear in nominative case (51a-51c).[9]

(51) a. *nišar le-xa hu
remained-3M.SG DAT-you-M.SG he
'You had this remained'

b. *nišar hu le-xa
remained-3M.SG he DAT-you-M.SG

c. *nišar le-xa ze
remained-3M.SG DAT-you-M.SG this

The disappearance of postverbal pronominal subjects is clearly an independent process of the process of loss of ϕ-agreement in untriggered VS, as evinced by the fact that it also applies in agreeing untriggered VS (52) as well as with other types of verbs in the triggered VS (53) with any type of verb (recall triggered inversion is possible with any type of verb (e.g. (1) in section 1)).

(52) *nišaru le-xa hem
remained-3PL DAT-you-M.SG they
'You had them remained'

(53) ?etmol yašnu hem
yesterday slept-3PL they
'Yesterday they slept'

[8]I am unaware of a study tracing the origin of this process.

[9]The dative pronoun is always adjacent to the verb, unless there is a nominative pronoun too. Hence, both orders (51a) and (51b) are allowed (but ungrammatical for other reasons). In (51c), this is the only order allowed.

Nonetheless, the disappearance of postverbal pronominal nominative subjects may have led to or expedited the loss of nominative case in the internal argument position of untriggered VS.

Following Landau (2004, 2006, 2008), Marantz (2000) and Sigurðsson (2003, 2006) (among others), I assume that structural case is a morphological marker rather than a form of licensing. I suggest that case is only necessary for a noun phrase to be visible to the probe. The loss of ϕ-agreement between the unaccusative verb and its postverbal subject makes nominative case superfluous on the subject in this configuration. This is so because in the absence of ϕ-agreement, the relevant head (T) does not probe for a nominative noun phrase in its search (c-command) domain.

Moreover, while the postverbal pronominal subject in untriggered VS cannot appear in default, nominative case ((51a-51c) above), it can be realized as an accusative (direct object) pronoun (54a) or introduced by the direct object marker *et* (which introduces definite direct objects) in the case of a demonstrative (54b). With other types of verbs (in the triggered VS) a nominative pronominal postverbal subject is either impossible or belongs to archaic Hebrew (as in (53) above). However, insertion of an accusative pronoun or the direct object marker is clearly completely impossible (55).

(54) a. ?nišar le-xa oto
remained-3M.SG DAT-you-M.SG him

b. ?nišar le-xa et ze
remained-3M.SG DAT-you-M.SG ACC this

(55) *etmol yašnu otam
yesterday slept-3PL them

Thus, the insertion of the direct object marker is licensed by the speakers' implicit knowledge that the subject of unaccusatives is an internal argument, based on its thematic role. Since with other types of verbs in the triggered VS, the subject is not in the internal argument position, the direct object marker or the accusative pronoun cannot be inserted.

The marker *et* has already been argued to be inserted to introduce caseless definite noun phrases, pronominal subjects and lexical DPs (56-59), specifically, in adjectival constructions (see Siloni (1997)).

(56) xaser li oto kan
missing-M.SG DAT-me him here
'I am missing him here'

(57) haya katuv šam et ze
was-3M.SG written-M.SG there ACC this
'This was written there'

(58) lo haya katuv et ha-ša'a
NEG was-3M.SG written-M.SG ACC the-hour-F.SG
'The hour was not written'

(59) xaser li et ha-madrega ben-le-ven
missing-M.SG DAT-me ACC the-step-F.SG in-between
'I am missing the step in between'

Indeed, as already shown in section 1, in untriggered VS, too, the direct object marker starts appearing beyond the pronominal domain. Some unaccusative verbs can introduce a postverbal lexical subject by means of the object marker, as long as the subject is definite and inanimate (see Halevy (2016)).[10] Consider the examples in (11-12) repeated below as (62-63), respectively. While verbs like *hofi'a* 'appeared' (62), *nišar* 'remained' (63) and *ala* 'arose' (64) may mark their subjects with *et*, verbs like *nišbar* 'broke' (65) or *nisgar* 'closed' (66) do not seem to do so:

(62) hofi'a li et ha-mila ha-zot ba-milon
appeared-3M.SG DAT-me ACC the-word-F.SG the-this-F.SG in-the-dictionary
'This word appeared in the dictionary'

(63) nišar li et ha-sfaton-im ha-regil-im
remained-3M.SG DAT-me ACC the-lipstick-M.PL the-regular-M.PL
'The regular lipsticks remained'

(64) ala li et ha-maxšava ha-zot
arose-3M.SG DAT-me ACC the-thought-F.SG the-this-F.SG

[10]Similar examples were found in Modern Standard Arabic (MSA). When the unaccusative verb *baqia* 'remained' has an internal subject in the dual form, it is usually assigned nominative case (60), but it may also be assigned accusative case (61).

(60) baqia su'al-an
remained-3M.SG question-DUAL.NOM
'Two questions remained'

(61) baqia su'al-ayn
remained-3M.SG question-DUAL.ACC

'This thought came to my mind'

(65) *nišbar li et ha-šulxan
broke-3M.SG DAT-me ACC the-table-M.SG
'My table broke'

(66) *nisgar li et ha-xalon
closed-3M.SG DAT-me ACC the-window-M.SG
'The window closed'

The common denominator of the verbs that allow the accusative marking of their subject (*hofi'a* 'appeared', *nišar* 'remained', and *ala* 'arose') seems to be that they involve an existential or possessive ingredient.[11] To understand why, let us briefly discuss existential and possessive constructions.

In earlier stages of Hebrew, agreement between the predicate and its postverbal subject in existential and possessive constructions was strict. During the revival of Hebrew, these constructions began to exhibit lack of agreement, and what used to be the postverbal subject, began to appear with the object marker (Berman, 1980; Melnik, 2006; Taube, 2015; Ziv, 1976) (67-68). Reasonably, this diachronic development took place due to a similar duality in existential and possessive constructions regarding ϕ-agreement options (see English examples (34-37) above). That is, the constructions started exhibiting lack of agreement with the postverbal argument, in addition to the agreement construal. Likewise, as suggested above with regard to untriggered VS, the realization of the postverbal subject with the direct object marker has become possible. More specifically, this happened owing to the loss of ϕ–agreement followed by the subject's loss of nominative, which got enhanced by the independent loss of pronominal postverbal nominative subjects. Nowadays, lack of agreement in existential and possessive constructions has become dominant and the lack of the object marker in these cases is judged by native speakers as archaic, poetic, odd or even impossible (69-70). Prescriptive Hebrew's attempts to resist this process have failed (Ben-Mordechai, 1943).

(67) haya et ha-sefer ha-ze ba-sifriya
was-3M.SG ACC the-book the-this in-the-library
'This book could be found in the library'

[11] I would like to thank Prof. Julia Horvath (p.c.) for suggesting this hypothesis.

(68) haya (li) oto ba-sifriya
was-3M.SG (DAT-me) him in-the-library

(69) *haya (li) hu ba-sifriya
was-3M.SG (DAT-me) he in-the-library
'It was/(I had it) in the library'

(70) #haya ha-sefer ha-ze ba-sifriya
was-3M.SG the-book the-this in-the-library

Thus, it seems that the process that untriggered VS is undergoing nowadays mirrors the one existential and possessive constructions had undergone in the previous century. However, in existential and possessive constructions, the process has been completed, the construction got stabilized and the postverbal DP is reanalyzed as a direct object, obligatorily appearing with the accusative marking when definite. In contrast, in untriggered VS, the insertion of the direct object marker is limited. This is expected as the process of loss of ϕ–agreement with unaccusatives is much more recent and characterizes only low registers of colloquial Hebrew, alongside the prevailing, normative agreeing construction.

The resemblance between the earlier process and the current one may be the reason why the unaccusative verbs attested with the direct object marker are those having an existential or possessive ingredient. The ubiquity of existential and possessive constructions, which involve a direct object marker, may have affected untriggered VS constructions, and hence it is the set of unaccusatives similar in meaning to the existential and possessive predicates which started appearing with accusative marking. This may (or may not) spread to additional unaccusatives in the future.

In order to shed more light on the occurrence of the direct object marker in untriggered VS, I ran Experiment 4. The experiment aims to examine whether the insertion of the direct object marker is contingent upon the loss of ϕ–agreement. Section 7 presents Experiment 4. Before turning to section 7, it should first be explained why lack of ϕ–agreement is more acceptable with the intervention of a possessive dative or an adverb, as shown by Experiments 2-3.

It seems that the prevalence of existential and possessive constructions can explain the improvement in acceptability of lack of ϕ-agreement in untriggered VS. Consider the following possessive construction:

(71) lo haya le-ron et ha-xoveret
NEG was-3M.SG DAT-Ron ACC the-notebook-F.SG
'Ron did not have the notebook'

This construction imposes the above order of complements, the possessor preceding the possessee. The inverse word order is impossible, unless the dative possessor is stressed: [12]

(72) *lo haya et ha-xoveret le-ron
NEG was-3M.SG ACC the-notebook-F.SG DAT-Ron

The frequency of the possessive construction, which exhibits lack of agreement and possessor-possessee word order, may be the factor improving the acceptability of lack of ϕ-agreement in the presence of a possessive dative.

Next, consider existential constructions. The common word-order for such constructions is represented in (67), repeated here as (73). The structure in (74) where the locative follows the verb is also possible, though it seems to require special focus:

(73) haya et ha-sefer ha-ze ba-sifriya
was-3M.SG ACC the-book the-this in-the-library
'This book could be found in the library'

(74) haya ba-sifriya et ha-sefer ha-ze
was-3M.SG in-the-library ACC the-book the-this

Here too, the frequency of the existential construction may be improving the acceptability of lack of agreement in untriggered VS in the presence of an intervening adverb (although both orders in (73-74) are possible).

7 Experiment 4

Experiment 4 examined the correlation between the occurrence of the accusative (direct object) marker and agreement by comparing Agreement sentences with and without the accusative marker to Singular-Plural sentences with and without the accusative marker. The Agreement condition with the accusative marker (75d) was predicted to be significantly less acceptable than all other conditions, since according to the proposal advanced here, accusative marking is

[12] With pronominal possessive datives the order is strictly 'dative-direct object' since a pronominal dative must be adjacent to the verb

contingent upon the loss of agreement. As detailed above, agreement and accusative marking should not be able to co-occur, since the accusative marking on the postverbal DP marks the loss of case in this position which stems from lack of agreement. The Agreement condition without the accusative marker (75c) is predicted to be the most acceptable, since it obeys the normative rules of Hebrew. As the occurrence of the accusative marker is limited to certain verbs, the Singular-Plural condition without the accusative marker (75a) should be more acceptable than the one with the accusative marker (75b). Both Singular-Plural conditions are predicted to be significantly more acceptable than the Agreement condition with accusative marking but less acceptable than the Agreement condition without accusative marking. However, we were aware that the limited distribution of the direct object marker in untriggered VS (as reflected by corpora) may affect the results.

7.1 Method

7.1.1 Participants

64 adults aged 18-40 (mean age = 26.5), all monolingual native speakers of Hebrew, participated in the study.

7.1.2 Materials

There were twelve sets of experimental items, each consisting of four conditions: Singular-Plural without the accusative marker (75a), Singular-Plural with the accusative marker (75b), Agreement without the accusative marker (75c), and Agreement with the accusative marker (75d).

(75) a. nišar l-anu ha-xulc-ot ha-ele ba-maxsan
remained-3M.SG DAT-us the-shirt-F.PL the-these in-the-storage
'We have these shirts left in the storage'

b. nišar l-anu et ha-xulc-ot ha-ele ba-maxsan
remained-3M.SG DAT-us ACC the-shirt-F.PL the-these in-the-storage

c. nišaru l-anu ha-xulc-ot ha-ele ba-maxsan
remained-3PL DAT-us the-shirt-F.PL the-these in-the-storage

d. nišaru l-anu et ha-xulc-ot ha-ele ba-maxsan
remained-3PL DAT-us ACC the-shirt-F.PL the-these in-the-storage

The verbs used in this experiment were all unaccusative verbs that occurred with accusative marking in corpora. However, the occurrence of two of them with the accusative marker was clearly more frequent. These verbs were *nišar* 'remained' and *hofia* 'appeared'.

7.1.3 Procedure

The procedure was identical to that of Experiment 1.

7.2 Results

Table 4: Mean acceptability ratings and standard deviation of Agreement and Singular-Plural sentences with and without accusative marking.

	Mean(SD)	
Condition	Agreement	Singular-Plural
No-accusative	5.38(1.32)	2.73(1.26)
Accusative	2.2(0.95)	2.02(0.78)

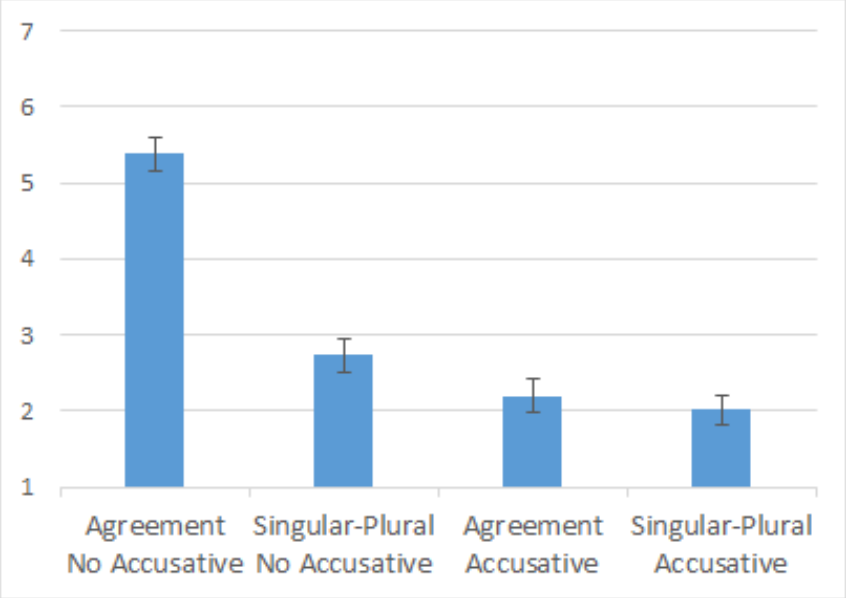


Figure 4: Mean acceptability ratings and standard deviation of Agreement and Singular-Plural sentences with and without accusative marking (Error bars represent ±1 standard error).

A two-way repeated measures ANOVA found a significant main effect for Agreement by participants ($F1(1,63) = 182.315$, $p < 0.001$) and by items ($F2(1,11) = 78.427$, $p < 0.001$), and

for Case by participants ($F1(1,63) = 220.412$, $p < 0.001$) and by items ($F2(1,11) = 92.126$, $p = 0.001$). The main effect for Agreement was significantly moderated by Case, by participants ($F(1,63) = 147.877$, $p < 0.001$) and by items ($F(1,11) = 123.827$, $p < 0.001$). This means that the decrease in acceptability for lack of agreement was more pronounced in the no-accusative condition than in the accusative condition.

Paired two-tailed t-tests (Bonferroni-corrected for multiple comparisons) showed that the Agreement no-accusative condition was significantly more acceptable than all other conditions by participants and by items: the Singular-Plural no-accusative condition ($t(63) = 15.839$, $p < 0.001$, $t(11) = 11.863$, $p < 0.001$), the Agreement accusative condition ($t(63) = 17.243$, $p < 0.001$, $t(11) = 16.220$, $p < 0.001$) and the Singular-Plural accusative condition ($t(63) = 19.915$, $p < 0.001$, $t(11) = 12.262$, $p < 0.001$). In addition, the Singular-Plural no-accusative condition was significantly more acceptable than the Agreement accusative condition ($t(63) = 3.185$, $p = 0.002$, $t(11) = 2.204$, $p = 0.05$) and the Singular-Plural accusative condition ($t(63) = 4.978$, $p < 0.001$, $t(11) = 2.752$, $p = 0.019$). The difference between the Agreement accusative condition and the Singular-Plural accusative condition was non-significant ($t(63) = 1.558$, $p = 0.124$, $t(11) = 1.169$, $p = 0.267$).

7.3 Discussion

The results show that both no-accusative conditions were significantly better than the accusative conditions, and no significant difference between the accusative conditions was found. These results were contrary to the predictions. The choice of materials for this experiment took into account the observation that not all unaccusatives appear with the accusative marker. But although all the verbs used in the experiment were found with the accusative marker in corpora, some were clearly more frequent than others. These verbs were: *nišar* 'remained' and *hofi'a* 'appeared'. The ratings of these items were examined, and in one of the sets, the Singular-Plural accusative condition of the verb *nišar* was as high as 4.06, and *hofi'a* received 3 (while the average rating of this condition was 2.02). Accusative marking in the relevant examples was rather acceptable. More generally, it seems that accusative marking with unaccusatives is still not very prevalent and is regarded as significantly less acceptable, regardless of agreement.

8 Conclusion

The results of experiments 1, 2 and 3 were crucial for our understanding of the agreement patterns of unaccusative verbs in untriggered VS. We can conclude that lack of agreement with unaccusatives in this construction is grammatical in a low register of colloquial Hebrew, and that intervention improves, but is not required for lack of agreement. Experiments 2-3 further revealed that not only datives but also adverbs, pronominal and non-pronominal, improve lack of agreement. This shows that Preminger's failure-to-agree approach, which crucially requires a possessive dative intervention for the licensing of lack of agreement is untenable. The results of Experiment 4, which examined the distribution of the direct object marker in untriggered VS with and without agreement, did not verify our predictions. This, we argue, follows from the fact that its distribution is limited to a small set of verbs. The fact remains that speakers increasingly introduce postverbal internal argument subjects by means of the direct object marker, especially, pronouns and demonstratives. In the attested examples for such sentences, agreement between the verb and the postverbal argument was never attested.

The proposal put forth is as follows. The process untriggered VS constructions are currently undergoing mirrors the one that Hebrew existential and possessive constructions had undergone in the previous century. Untriggered VS constructions enable two agreement construals: (i) agreement with the postverbal argument (subject) bearing nominative case; (ii) lack of agreement with the postverbal argument, manifested by default third person singular agreement. The lack of ϕ-agreement enhanced by the independent disappearance of postverbal nominative pronouns has led to the loss of nominative case in the internal argument position (of agreement-less VS constructions), and in some cases to an object marking of the postverbal argument.

It is possible that with time, lack of agreement in these constructions will become more and more prevalent, as well as the direct object marking of the postverbal internal argument. Perhaps running the experiments presented in this thesis in a few years from now will yield higher acceptability ratings for lack of agreement sentences, which are currently perceived as going bluntly against the normative rules of Hebrew.

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Appendix A: Unaccusatives versus Unergatives

Untriggered VS constructions as well as the lack of verb-subject agreement they show in low registers of colloquial Hebrew are attested only with unaccusative verbs. Obtaining experimental corroboration for this observation is not a simple task; since unergatives do not appear in untriggered VS, it is not obvious how they can be tested regarding lack of agreement.

However, Siloni (2012) has observed that unergative verbs occur in V-loc(ative)-S order, that is, with an intervening locative between the verb and its subject. This is illustrated in (76a) where there is a pronominal locative between the verb and the subject. Unlike VS order with unaccusatives, such sentences do not occur without ϕ–agreement, and speakers judge sentences such as (76b) as ungrammatical.

(76) a. yašnu po xatul-im etmol
slept-3PL here cat-M.PL yesterday
'Some cats slept here yesterday'

b. *yašan po xatul-im etmol
slept-3M.SG here cat-M.PL yesterday

Relying on the observation that unergatives appear in V-loc-S order, I ran an experiment to examine the acceptability of lack of agreement with unaccusatives and lack of agreement with unergatives, predicting the latter to be significantly less acceptable since the subject of unergatives is not an internal argument and lack of agreement with unergatives is unattested. These sentences were compared to Agreement sentences, which were predicted to be acceptable in both cases, but perhaps less so with unergatives, which rarely appear in VS order. Thus, the design of the experiment was a 2x2, with the factors Verb Type (Unergative/Unaccusative) and Agreement (Agreement/Singular-Plural).

Method

Participants

88 adults aged 19-40 (mean age = 27.9), all monolingual native speakers of Hebrew, participated in the study.

Materials

Twelve sets of experimental items were construed, each consisting of four conditions: Agreement with an unaccusative (77a), Agreement with an unergative (77b), Singular-Plural with an unaccusative (77c), and Singular-Plural with an unergative (77d).

(77) a. naflu li kan ha-bubot
fell-3PL DAT-me here the-doll-F.PL
'My dolls fell here'

b. rakdu li kan ha-bubot
danced-3PL DAT-me here the-doll-F.PL
'The dolls danced here (and it surprised me)'

c. nafal li kan ha-bubot
fell-3M.SG DAT-me here the-doll-F.PL

d. rakad li kan ha-bubot
danced-3M.SG DAT-me here the-doll-F.PL

In order for the unaccusative and unergative conditions to differ only in the type of verb, all sentences included an intervening nonselected dative and a locative. While unergatives cannot take a possessive dative, they can, like any other predicate, take the so-called ethical dative. Thus, in (77b) and (77d) the dative gets interpreted as ethical, that is, as somehow affected by the action denoted by the sentence. Unlike possessive datives, ethical datives must be pronominal and do not refer to any DP in the sentence (Borer & Grodzinsky, 1986). In (77a) and (77c), the dative can be interpreted as either possessive or ethical, as the verbs are unaccusative. The intervening locative enables the VS order with unergatives, as explained above and exemplified in (76a). The additional intervening dative is meant to provide the most appropriate conditions for the Singular-plural condition with unaccusatives (as suggested by the results of experiments 2-3).

Since unergatives normally require that the subject be agentive and unaccusatives require the opposite, the subjects used were such that could be interpreted as both, e.g., animals and objects such as robots and dolls.

Procedure

The procedure was identical to that of the previous experiments.

Results

Table 5: Mean acceptability ratings and standard deviation of Agreement and Singular-Plural sentences with unaccusative and unergative verbs.

	Mean(SD)	
Condition	Agreement	Singular-Plural
Unaccusative	4.73(0.2)	2.19(0.16)
Unergative	3.82(0.2)	1.64(0.11)

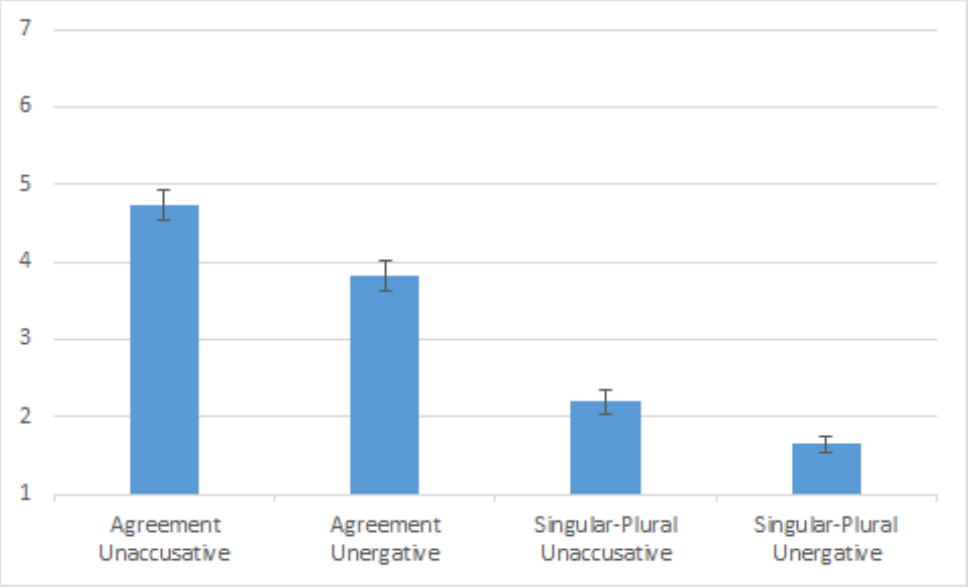

Figure 5: Mean acceptability ratings and standard deviation of Agreement and Singular-Plural sentences with unaccusative and unergative verbs (Error bars represent ±1 standard error).

A two-way repeated measures ANOVA found a significant main effect for agreement by participants ($F1(1,87) = 273.023$, $p < 0.001$) and by items ($F2(1,11) = 743.672$, $p < 0.001$), and for verb type by participants ($F1(1,87) = 73.4$, $p < 0.001$) and by items ($F2(1,11) = 21.415$, $p = 0.001$). The main effect for Verb Type was qualified by a significant interaction between Agreement and Verb Type by participants ($F(1,87) = 5.997$, $p = 0.016$) so that the decrease in acceptability was more pronounced with unergatives than with unaccusatives in the Agreement condition.

Paired two-tailed t-tests (Bonferroni-corrected for multiple comparisons) showed that Agreement sentences with unaccusatives were judged as significantly more natural than Agreement sentences with unergatives by participants ($t(87) = 7.157$, $p < 0.001$) and by items ($t(11) = 3.878$, $p = 0.006$). Further, Singular-Plural sentences with unaccusatives were judged as significantly

more natural than Singular-Plural sentences with unergatives by participants ($t(87) = 5.69$, $p < 0.001$) and by items ($t(11) = 3.505$, $p = 0.01$).

Discussion

The results did not confirm our expectations. VS order with unaccusatives is significantly more acceptable than with unergatives, not only in the Singular-Plural condition, but also and even more prominently so in the Agreement condition. The design of this experiment has been based on the observation that VS order with unergatives is possible when there is a locative intervener between the verb and its subject. This assumption has never been experimentally tested before. The significant difference revealed between unaccusatives and unergatives in the Agreement condition does not provide support to this observation. Two possible explanations come to mind. First, it is possible that the observation is not accurate, and an intervener improves VS with unergatives but does not make the VS order as acceptable as the VS with unaccusatives. Second, recall that in addition to the locative, a dative was also inserted between the verb and its subject to provide the most appropriate conditions for the Singular-plural condition with unaccusatives (see experiments 2-3). This addition may have had a negative effect on the acceptability of the VS order with unergatives. This issue is left for future research. Further, contrary to expectations, the decrease in acceptability due to unergativity was more pronounced in the Agreement condition than in the Singular-Plural condition. This may be the result of the well-known central tendency bias (i.e., participants' tendency to avoid using extreme response categories). The average obtained by unergatives in the Singular-Plural condition was 1.64 and the lowest point on the scale was 1. Hence, there was not much room for further decrease, much more so since participants refrain from choosing extreme response categories, in this case, extremely low ones.

It is important to note that even though this was not the purpose of the experiment, the results provide an additional piece of evidence to the split intransitivity hypothesis (Burzio, 1986; Perlmutter, 1978). Unergatives and unaccusatives clearly exhibit a different behavior in this experiment, as shown by the significant main effect for verb type.

Appendix B: Singular-Plural Agreement with Intervention

1	nafal le-dan ha-maftex-ot ba-sedek fell-3M.SG DAT-Dan the-key-M.PL in-the-crack 'Dan's keys fell in the crack'
2	hitkalef la-soxrim ha-kir-ot ba-šipuc peeled-3M.SG DAT-the-renters the-wall-M.PL in-the-renovation 'The renters' walls peeled off during the renovation'
3	hit'arex la-sar ha-pgiš-ot etmol became-longer-3M.SG DAT-the-minister the-meeting-F.PL yesterday 'The minister's meetings yesterday were extended'
4	nixba la-tošavim ha-or-ot baxuc turned-off-3M.SG DAT-the-residents the-light-M.PL outside 'The residents' lights outside went out' (the residents were affected by the event)
5	gadal la-dayarim ha-hoca-ot ba-xoref increased-3M.SG DAT-the-inhabitants the-expense-F.PL in-the-winter 'The residents' expenses increased in the winter'
6	nisraf le-ronen ha-nur-ot ba-erev burnt-3M.SG DAT-Ronen the-light-bulb-F.PL in-the evening 'Ronen's light bulbs burned out in the evening'
7	nišpax la-melcar ha-maška-ot ba-xatuna spilt-3M.SG DAT-the-waiter the-drink-M.PL in-the-wedding 'The waiter spilled the drinks in the wedding'
8	ne'elam le-yosi ha-štar-ot me-ha-megira disappeared-3M.SG DAT-Yosi the-banknote-M.PL from-the-drawer 'Yosi's money disappeared from the drawer'
9	nivla le-dana ha-matbe-ot ba-mexona swallowed-3M.SG DAT-Dana the-coin-M.PL in-the-vending-machine 'Dana's coins got stuck in the vending machine'

10	neheras le-beni ha-kis'-ot ba-mesiba ruined-3M.SG DAT-Benny the-chair-M.PL in-the-party 'Benny's chairs got ruined in the party'
11	nigmar le-dina ha-ugi-ot ba-erev ended-3M.SG DAT-Dina the-cookie-F.PL in-the-evening 'Dina ran out of cookies in the evening'
12	hitbatel le-roni ha-šiur-im ba-boker got-canceled-3M.SG DAT-Roni the-lesson-M.PL in-the-morning 'Roni's lessons got canceled in the morning'
13	hitkalkel le-daniela ha-maxšev-im ba-misrad broke-3M.SG DAT-Daniela the-computer-M.PL in-the-office 'The computers in Daniela's office broke'
14	nignav le-keren ha-taxšit-im me-ha-xeder PASS-stolen-3M.SG DAT-Keren the-jewel-M.PL from-the-room 'Keren's jewels got stolen from the room'
15	nifga le-itamar ha-cmax-im ba-sufa got-damaged-3M.SG DAT-Itamar the-plant-M.PL in-the-storm 'Itamar's plants got damaged in the storm'
16	nišbar la-šxenim ha-xalon-ot ba-seara broke-3M.SG DAT-the-neighbors the-window-M.PL in-the-storm 'The neighbors' windows broke in the storm'
17	nisgar la-metavxim ha-misrad-im PASS-closed-3M.SG DAT-the-real-estate-agents the-office-M.PL ha-boker the-morning 'The real-estate agents' offices were closed (by someone) this morning'
18	hitparek la-metajlim ha-ohal-im ba-ruax fell-apart-3M.SG DAT-the-travelers the-tent-M.PL in-the-wind 'The travelers' tents fell apart in the wind'

Appendix C: Intervention Type Stimuli

1	nišpax (le-maya/milion/be-ta'ut) xaruz-im al-ha-ricpa spilt-3M.SG (DAT-Maya/million/accidentally) bead-M.PL on-the-floor '(Maya's/A million/Accidentally) beads were spilt on the floor'
2	nidbak (le-maya/hamon/šuv) al-im le-ha-šimša stuck-3M.SG (DAT-Maya/lots-of/Again) leaf-M.PL to-the-windowpane '(Maya had/Lots of/Again) leaves stuck to the windowpane'
3	ne'elam (le-yosi/harbe/etmol) dvar-im disappeared-3M.SG (DAT-Yosi/many/yesterday) thing-M.PL me-ha-mizvada from-the-suitcase '(Yosi's/Many/Yesterday) stuff disappeared from the suitcase'
4	hitbatel (le-asaf/male/bidiyuk) harca-ot be-ha-kenes cancelled-3M.SG (DAT-Asaf/lots-of/exactly) lecture-F.PL in-the-conference '(Asaf's/Lots of/Just now) lectures in the conference got cancelled'
5	nixnas (le-gili/elef/pit'om) zvuv-im le-ha-oxel entered-3M.SG (DAT-Gili/thousand/suddenly) fly-M.PL to-the-food '(Gili's/A thousand/Suddenly) flies got in the food'
6	nivla (le-dan/kama/hayom) matbe-ot be-ha-mexona swallowed-3M.SG (DAT-Dan/a-few/today) coin-M.PL in-the-machine '(Dan's/A few/Today) coins got stuck in the vending machine'

7	nidlak (le-roni/elef/pit'om) nur-ot turned-on-3M.SG (DAT-Roni/thousand/suddenly) light-bulb-F.PL be-ha-mexonit in-the-car '(Roni had/A thousand/Suddenly) warning lights appeared in the car'
8	nišbar (le-roni/hamon/hayom) sfal-im be-ha-kior broke-3M.SG (DAT-Roni/lots-of/today) mug-M.PL in-the-sink '(Roni's/Lots of/Today) mugs broke in the sink'
9	ne'ebad (le-yosi/harbe/šuv) xafac-im be-ha-dira got-lost-3M.SG (DAT-Yosi/many/again) item-M.PL in-the-apartment '(Yosi's/A lot of/Again) stuff got lost in the apartment'
10	nisraf (le-asaf/male/etmol) man-ot be-ha-misada got-burnt-3M.SG (DAT-Asaf/lots-of/yesterday) dish-F.PL in-the-restaurant '(Asaf's/Lots of/Yesterday) plates got burnt in the restaurant'
11	hitpazer (le-gili/milion/be-ta'ut) zxuxi-ot be-ha-mitbax scattered-3M.SG (DAT-Gili/million/accidentally) glass-F.PL in-the-kitchen '(Gili had/A million/Accidentally) glasses scattered in the kitchen'
12	nafal (le-dan/kama/bidiyuk) argaz-im me-ha-tender fell-3M.SG (DAT-Dan/a-few/exactly) box-M.PL from-the-truck '(Dan's/A few/Just now) boxes fell from the truck'

Appendix D: Pronominal Dative and Pronominal Locative Stimuli

1	nigmar l-anu/po ha-kartis-im ended-3M.SG DAT-us/here the-ticket-M.PL Dative: 'We ran out of tickets'; Locative: 'There are no more tickets here'
2	nišbar li/kan ha-calax-ot broke-3M.SG DAT-me/here the-plate-F.PL Dative: 'My plates got broken'; Locative: 'The plates here are broken'
3	nafal li/po ha-sfar-im fell-3M.SG DAT-me/here the-book-M.PL Dative: 'My books fell'; Locative: 'The books fell here'
4	hitkalkel l-anu/kan ha-yogurt-im got-spoiled-3M.SG DAT-us/here the-yogurt-M.PL 'Our/The yogurts got spoiled'
5	ne'elam li/po ha-mismax-im disappeared-3M.SG DAT-me/here the-document-M.PL 'My/The documents disappeared'
6	hityabeš l-anu/kan ha-prax-im got-dried-3M.SG DAT-us/here the-flower-M.PL Dative: 'Our flowers dried up'; Locative: 'The flowers here dried up'

7	neheras l-anu/po ha-acic-im got-destroyed-3M.SG DAT-us/here the-planter-M.PL Dative: ‘Our planters got ruined’; Locative: ‘The planters here got ruined’
8	hitlaxlexu l-anu/kan ha-mexoni-ot got-dirty-3M.SG DAT-us/here the-car-F.PL Dative: ‘Our cars got dirty’; Locative: ‘The cars here got dirty’
9	nirtav li/po ha-saki-ot got-wet-M.SG DAT-me/here the-bag-F.PL ‘My/The bags got wet’
10	nidlak l-anu/po ha-nur-ot turned-on-3M.SG DAT-us/here the-bulb-F.PL ‘The lights turned on’
11	hitkamet li/kan ha-dap-im became-wrinkled-3M.SG DAT-me/here the-sheet-M.PL ‘The sheets got wrinkled’
12	hitpazer li/kan ha-xaruz-im scattered-3M.SG DAT-me/here the-bead-M.PL Dative: ‘My beads scattered around’; Locative: ‘The beads scattered around here’

Appendix E: Object Marking Stimuli

1	hofi'a l-anu et ha-mašov-im ha-ele ba-seker appeared-3M.SG DAT-us ACC the-feedback-M.PL the-these in-the-poll 'This feedback for us appeared in the poll'
2	nišar l-axem et ha-bgad-im he-ele remained-3M.SG DAT-you-PL ACC the-clothing-M.PL the-these ba-aron in-the-closet 'You have these clothes remained in the closet'
3	ala li et ha-maxšav-ot ha-ele ba-harca'a arose-3M.SG DAT-me ACC the-thought-F.PL the-these in-the-lecture 'These thoughts came up to me during the lecture'
4	ne'elam l-exa et ha-klaf-im he-ele disappeared-3M.SG DAT-you-M.SG ACC the-card-M.PL the-these me-ha-megira from-the-drawer 'Your cards disappeared from the drawer'
5	xazar l-ahem et ha-takal-ot ha-ele ba-aplikacia returned-3M.SG DAT-them ACC the-bug-F.PL the-these in-the-application 'They have these bugs in the application again'
6	nafal la et ha-nacnac-im ha-ele me-ha-simla fell-3M.SG DAT-her ACC the-glitter-M.PL the-these from-the-dress 'This glitter fell from her dress'

7	hofi'a la et ha-ciun-im ha-ele ba-atar appeared-3M.SG DAT-her ACC the-score-M.PL the-these in-the-website 'Her scores appeared on the website'
8	nišar l-anu et ha-xulc-ot ha-ele ba-maxsan remained-3M.SG DAT-us ACC the-shirt-F.PL the-these in-the-storage 'We have these shirts left in the storage'
9	ala l-axem et ha-beay-ot ha-ele ba-pgiša arose-3M.SG DAT-you-PL ACC the-problem-F.PL the-these in-the-meeting 'These problems arouse in your meeting'
10	ne'elam l-ahem et ha-mismax-im ha-ele disappeared-3M.SG DAT-them ACC the-document-M.PL the-these me-ha-misrad from-the-office 'These documents disappeared from their office'
11	xazar li et ha-mixtav-im ha-ele mi-xul returned-3M.SG DAT-me ACC the-letter-M.PL the-these from-abroad 'These letters were sent back to me from abroad'
12	nafal l-exa et ha-xaruz-im ha-ele me-ha-kufsa fell-3M.SG DAT-you-M.SG ACC the-bead-M.PL the-these from-the-box 'Your beads fell from the box'

Appendix F: Unergatives-Unaccusatives Stimuli

1	a.	hitpocec li kan ha-robot-im exploded-3M.SG DAT-me here the-robot-M.PL 'My robots exploded here'
	b.	hithalex li kan ha-robot-im walked-around-3M.SG DAT-me here the-robot-M.PL 'The robots walked around here (and it affected me)'
2	a.	hitpazer li kan ha-tarnegol-ot scattered-3M.SG DAT-me here the-hen-F.PL 'My hen were scattered around here'
	b.	kirker li kan ha-tarnegol-ot cackled-3M.SG DAT-me here the-hen-F.PL 'The hen cackled here (and it affected me)'
3	a.	nirtav li po ha-klavlav-im got-wet-3M.SG DAT-me here the-puppy-M.PL 'My puppies got wet'
	b.	navax li po ha-klavlav-im barked-3M.SG DAT-me here the-puppy-M.PL 'The puppies barked'
4	a.	hidaldel li po ha-dag-im dwindled -3M.SG DAT-me here the-fish-M.PL 'My fish dwindled'
	b.	saxa li po ha-dag-im swam-3M.SG DAT-me here the-fish-M.PL 'The fish swam here'

5	a.	hištana li kan ha-pokimon-im changed-3M.SG DAT-me here the-Pokémon-M.PL ‘My Pokémons changed’
	b.	hit’amen li kan ha-pokimon-im exercise-3M.SG DAT-me here the-pokemon-M.PL ‘The Pokémons trained’
6	a.	nafal li kan ha-bub-ot fell-3M.SG DAT-me here the-doll.F.PL ‘My dolls fell here’
	b.	rakad li kan ha-bub-ot danced-3M.SG DAT-me here the-doll.F.PL ‘The dolls danced here’
7	a.	ne’elam l-anu po ha-xataltul-im disappeared-3M.SG DAT-us here the-kitten-M.PL ‘Our kittens disappeared’
	b.	niškav l-anu po ha-xataltul-im lay-down-3M.SG DAT-us here the-kitten-M.PL ‘The kittens laid down here’
8	a.	neheras l-anu po ha-raxfan-im got-destroyed-3M.SG DAT-us here the-drone-M.PL ‘Our drones got destroyed’
	b.	naxat l-anu po ha-raxfan-im landed-3M.SG DAT-us here the-drone-M.PL ‘The drones landed here’

9	a.	hitlaxlex l-anu kan ha-xatul-im got-dirty -3M.SG DAT-us here the-cat-M.PL ‘Our cats got dirty’
	b.	yilel l-anu kan ha-xatul-im meowed-3M.SG DAT-us here the-cat-M.PL ‘The cats meowed’
10	a.	hit’akev l-anu po ha-rakav-ot got-delayed-3M.SG DAT-us here the-train-F.PL ‘Our trains got delayed’
	b.	ixer l-anu po ha-rakav-ot came-late-3M.SG DAT-us here the-train-F.PL ‘The trains came late’
11	a.	nigmar l-anu po ha-tayas-im finished-3M.SG DAT-us here the-pilot-M.PL ‘We are out of pilots’
	b.	hitmared l-anu po ha-tayas-im rebelled-3M.SG DAT-us here the-pilot-M.PL ‘The pilots rebelled’
12	a.	hitrasek l-anu kan ha-metos-im crashed-3M.SG DAT-us here the-airplane-M.PL ‘Our planes crashed’
	b.	nasak l-anu kan ha-metos-im took-off-3M.SG DAT-us here the-airplane-M.PL ‘The planes took off’

תקציר

בעברית, סדר המילים המוגדר כברירת מחדל הוא נושא-פועל(-מושא). עם זאת, הסדר פועל-נושא גם הוא אפשרי במקרים מסוימים. אחד מהמקרים הללו הוא המקרה בו הנושא הוא ארגומנט פנימי, כלומר, כאשר הפועל הוא פועל אנאקוזטיבי או פועל בסביל (Reinhart & Siloni, 2005; Shlonsky, 1997). בעברית דבורה, במשפטי פועל-נושא אלו, הנושא והפועל עלולים לא להציג התאם. אי-התאם זה בא לידי ביטוי בהתאם ברירת מחדל על הפועל (גוף שלישי זכר יחיד), גם אם הנושא בנקבה או מוטה ברבים (או ברבות). אותו חוסר התאם אינו אפשרי בסדר נושא-פועל המקביל.

הניתוח התיאורטי היחיד בספרות עבור סוגיה זו, בה נדמה כי התאם הוא אופציונלי בעברית דבורה, הוצע ע״י Preminger (2009). על פי ניתוח זה, התופעה הנידונה היא תופעת כישלון בהתאם, ולא התאם אופציונלי. הכישלון נובע מהופעתו של גורם מתערב בעל תכוניות התאם – ספציפית, בעל הקניין הדאטיבי – בין הפועל לנושא הבתר-פעלי. תופעה זו תומכת, לטענת Preminger, בגישתו, לפיה משפטים בהם הניסיון ליצירת התאם מסתיים בכישלון הם משפטים דקדוקיים.

בתזה זו אני מציעה מודל חלופי לתופעת העדר ההתאם. ראשית, מסתמן שמבנים הכוללים פועל אנאקוזטיבי ונושא בתר-פעלי הם מבנים בלתי יציבים מבחינת התאם בשפות שונות. לטענתי, זה כך היות שעבור הדוברים ישנם שני ניתוחים מורפולוגיים אפשריים למבנים אלה: (i) התאם עם הארגומנט הבתר-פעלי (הנושא); (ii) חוסר התאם עם הארגומנט הבתר-פעלי. ניתוח (i) מחייב נושא נומינטיבי, בעוד שניתוח (ii) עשוי להוביל לאובדן יחסת הנומינטיב ולסימון מורפולוגי אחר עבור אותו ארגומנט. תימוכין ראשוניים עבור גישה זו הם: (א) דוגמות מתועדות של חוסר התאם בהיעדר גורם מתערב (מתאים); (ב) אובדן הנומינטיב בכינויי גוף נושאיים בתר-פועליים; (ג) דוגמות מתועדות של פעלים אנאקוזטיביים (מסוימים), שהנושא הבתר-פעלי שלהם מופיע עם סימון המושא הישיר.

מכיוון שהתחום האמפירי של מחקר זה שייך למשלב נמוך של עברית דבורה, אינטואיציות של חוקרים ודוגמות מתועדות אינן מספקות על מנת לקבל בסיס אמפירי מוצק. לפיכך, ערכתי 3 ניסויי שיפוטי טבעיות, על מנת לחקור את קבילות משפטי חוסר ההתאם עם גורם מתערב ובלעדיו, את השפעתם של גורמים מתערבים שונים, ואת תפוצת סימון המושא הישיר עם התאם ובלעדיו. תוצאות מבדקי הטבעיות הראו שחוסר התאם מקובל במשלב נמוך של עברית דבורה, ושהתערבות משפרת חוסר התאם, איך איננה תנאי הכרחי לחוסר התאם. בנוסף, לא רק בעל הקניין הדאטיבי, אלא גם תואר הפועל, שאין לו תכוניות התאם, משפרים את קבילות משפטי חוסר ההתאם. לאור זאת, אין עדות בעד גישת ״כישלון ההתאם״ של Preminger. תפוצת סימון המושא הישיר נמצאה מוגבלת למדי. התהליך אותו עוברים מבני פועל-נושא אלה בעברית הדבורה מזכיר את אותו התהליך שעברו מבני קיום ושייכות בעברית במאה הקודמת.

אוניברסיטת תל אביב

הפקולטה למדעי הרוח ע״ש לסטר וסאלי אנטין

החוג לבלשנות

מושא השינוי: דפוסי ההתאם של פעלים אנאקוזטיבים

חיבור זה הוגש כעבודת גמר לקראת התואר

״מוסמך אוניברסיטה״ באוניברסיטת תל אביב

על ידי:

נופר רימון

בהנחיית:

פרופ׳ טל סילוני

אוגוסט 2023