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Direct object resumption in Hebrew: How modality of presentation and relative clause position affect acceptability

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Abstract

Hebrew is generally considered a language with grammaticized resumption, in which resumptive pronouns (RPs) and gaps alternate freely in direct object position. The current study investigates whether and how speakers' acceptability judgments of direct object RPs in Hebrew are affected by the position of the relative clause in the main clause and the modality in which the sentences are presented. A hundred and eight Hebrew speakers completed an acceptability rating survey which included sentences with relative clauses modifying the main clause subject, direct, or indirect object, with either a gap or a resumptive pronoun. Modality of presentation was visual for half of the participants, and auditory for the other half. Results show that Hebrew speakers consistently judge direct object resumptives as less natural than gaps, particularly when sentences are presented in written form. The position of the relative clause does not interact with the acceptability of the RP. We discuss how different processing considerations may have contributed to the pattern of results observed.
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Keywords: Resumption; Resumptive pronouns; Relative clauses; Hebrew; Auditory modality; Acceptability ratings

1. Introduction

Hebrew is generally considered a language with grammaticized resumptive pronouns (RPs), namely, a language in which resumption is a productive strategy of forming A'-dependencies, obligatory in some syntactic environments and unquestionably acceptable in others. In particular, an observation often repeated in the literature is that in Hebrew relative clauses, RPs are obligatory in indirect object position, and may alternate freely with gaps in the direct object position (Beltrama, 2013; Borer, 1984; Sells, 1984; Shlonsky, 1992), as exemplified in (1a and b):

(1) a. *ze   ha-iš še-šamati   alav*   (Adjusted from Shlonsky, 1992)
         this the-man that-heard.1st.sg about-him
         'This is the man that I heard about.'
     b. *ze   ha-iš   še-ra'iti   (oto)*
         this the-man that-saw.1st.sg him
         'This is the man that I saw.'

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This contrasts with the situation in so-called 'intrusive resumptive' languages (Sells, 1984). In these languages, RPs are generally judged as ungrammatical. However, their status may be improved in certain environments. For example, it has been claimed that in English, RPs in relative clauses become more acceptable as the relativized position is more deeply embedded (Alexopoulou and Keller, 2007; Ariel, 1999; Dickey, 1996; Erteschik-Shir, 1992) and that RPs are preferred over gaps in island configurations (Beltrama, 2013; Ross, 1967; Sells, 1984). The reason for this, however, is still debated. Whereas traditionally, resumption was viewed as a means, built into the grammar, to bypass movement when the latter is impossible (i.e. in islands, see, for example Ross, 1967; Sells, 1984), more recently there have been suggestions that RPs facilitate processing – comprehension or production – of challenging constructions, and it is this function which renders them more acceptable in certain structures. In production, RPs can rescue a sentence which was, so to speak, not planned properly, e.g. where the required gap would need to appear inside an island. As noted by Polinsky et al. (2014), resumption is a way for speakers to maintain coreference without breaking the production chain. In comprehension, the occurrence of an RP was argued to facilitate the formation of dependencies as it aids in the retrieval or reactivation of the filler (Asudeh, 2004; Dickey, 1996; Erteschik-Shir, 1992; Hawkins, 1999) or enables an anaphoric processing strategy which circumvents the standard, cyclic syntactic processing associated with filler-gap dependencies (Alexopoulou and Keller, 2007; Hawkins, 2005). In principle, it is not easy to decide between a representation-based account and a processing-based one because improved grammaticality (e.g. of English RPs in islands) may be attributed not only to a well-formed representation, but also to less demanding processing (e.g. Sprouse, 2008).

As mentioned above, in Hebrew, RPs in object relative clauses have generally been considered grammatical. Several accounts have been proposed for this difference between Hebrew and English. Shlonsky (1992) suggests that Hebrew (but not English) possesses two (phonologically identical) relative complementizers, one which allows object movement to its specifier and another which does not. If a complementizer of the latter type is selected, movement is barred, and the sentence must contain an RP. In contrast to this grammatically oriented account, Ariel (1999) maintains that resumptives have a processing function cross-linguistically. Ariel conducted a corpus study on conversational Hebrew, and found that the vast majority of direct object relatives in the corpus (90%) included gaps. To account for her findings, Ariel proposed the Accessibility Theory, stating that a relatively high degree of mental accessibility of the head when the relativized position is reached favors gaps, whereas a relatively low degree of mental accessibility encourages the use of an RP. Accessibility is determined by a combination of factors, among them the distance between the head and the relativized position (see also Ariel, 1990), the length of the relative head, and the restrictive/nonrestrictive nature of the relative clause. Since most direct object relatives in Ariel's corpus showed a high degree of accessibility, they included gaps, rather than resumptives. Ariel proposes to capture the difference between grammaticized and intrusive resumptive languages by assuming that languages form a continuum, such that in certain languages, e.g. Hebrew, a gap covers a smaller portion of the higher accessibility range than in other languages, e.g. English.

Farby et al. (2010) examined the status of Hebrew direct object RPs in two grammaticality judgment experiments, manipulating the depth of embedding and the existence of an island. Their stimuli included Hebrew sentences with object relative clauses modifying the object of the main clause, where the gap/RP appeared either in a non-embedded position (2a), a single-embedded clause (2b), or a complex noun phrase constituting an island (2c).

(2)   a.   *dina   maskima   lifgoš   et   ha-calemet   še-dan   pagaš t / ota   be-xeyfa*
           Dina   agrees   to+meet   ACC   the-photographer   that-Dan   met   her   in-Haifa
           be-mikre.
           by-chance
           'Dina agrees to meet the photographer that Dan met in Haifa by chance.'
       b.   *dina   maskima   lifgoš   et   ha-calemet   še-tal   siper   še-dan   pagaš t / ota*
           Dina   agreed   to+meet   ACC   the-photographer   that-Tal   said   that-Dan   met   her
           be-xeyfa   be-mikre.
           in-Haifa   by-chance
           'Dina agrees to meet the photographer that Tal said that Dan met in Haifa by chance.'
       c.   *dina   maskima   lifgoš   et   ha-calemet   še-ha-xaver   še-pagaš t / ota*
           Dina   agrees   to+meet   ACC   the-photographer   that-the-friend   that-met   her
           be-xeyfa   nasa   le-šam   be-mikre.
           in-Haifa   went   there   by-chance
           'Dina agrees to meet the photographer that the friend who met her in Haifa went
           there by chance.'

Results showed that while RPs were judged as better than gaps inside the island, they received significantly lower ratings than gaps in the other two conditions. Specifically, the mean rating given to the sentences with RPs was about 0.5 point (on a 7-point scale) below that given to their gapped versions, both in the non-embedded and in the embedded version.

This finding is consistent with the fact that despite the consensus in the literature that Hebrew manifests free variation between gaps and RPs in direct object position, when asked, Hebrew speakers sometimes report that a gap is preferred in this position (this is also noted anecdotally in Friedmann and Costa, 2011). It is also consistent with Ariel's (1999) finding mentioned above, namely that 90% of direct object relative clauses in natural conversations include gaps, rather than RPs.

Importantly, however, Farby et al.'s (2010) study has one shortcoming, in that the items in the experiment consisted exclusively of relative clauses which modified the direct object of the main clause. In Hebrew, this type of structure with an RP in the relativized position results in two occurrences of the accusative markers '*et*: one on the direct object of the main clause and one on the resumptive pronoun in the relative clause's direct object position. To demonstrate, let us reconsider example (2a) repeated in (3) below:

(3)   *dina   maskima   lifgoš   **et**   ha-calemet   še-dan   pagaš   **ota**   be-*
       Dina   agrees   to+meet   **ACC**   the-photographer   that-Dan   met   **ACC**+she   in-
       xeyfa   be-mikre
       Haifa   by-chance
       'Dina agrees to meet the photographer that Dan met her in Haifa by chance.'

Based on the known phenomenon of 'deletion under identity' of prepositional phrases, it is possible that the embedding of a direct object RP under the main clause's direct object might have confounded speakers' acceptance rates. Cole (1976), Larson (1987) and Doron (2014), among others, note that it is possible to omit prepositional phrases from relative clauses that are embedded under a prepositional phrase when both prepositions are identical ((4a) and (5a)) and impossible when they are different ((4b) and (5b)):[1]

(4)   Adjusted from Doron (2014)
       a.   *dani   yašav   'al   kol   kise   še-ben-gurion   yašav   (alav).*
            Dani   sat   on   every   chair   that-Ben-Gurion   sat   (on-it)
            'Dani sat on every chair that Ben-Gurion sat on.'
       b.   *dani   ra'a   kol   kise   še-ben-gurion   yašav   *('al-av)*
            Dani   saw   every   chair   that-Ben-Gurion   sat   *(on-it)
            'Dani saw every chair that Ben-Gurion sat on.'

(5)   (Adjusted from Larson 1978)
       a.   By 1999, I will have lived near every city that John has lived (near)
       b.   By 1999, I will have lived near every city that John has lived *(at)

In view of this phenomenon, it seems possible that the relatively low acceptability rates of structures like the one in (3) in Farby et al.'s (2010) study were due to an expectation that these environments would invoke 'deletion under identity'; and hence, that on a par with prepositional phrases, the second accusative marker and the resumptive would not appear in the sentence. As a result, in cases where this expectation was not met, i.e. in the RP condition, acceptability ratings were lower.[2]

In addition, it is important to note that in Farby et al.'s (2010) experiment, all stimuli were presented visually. If, as mentioned previously, RPs are indeed phrases which facilitate processing of challenging constructions, and specifically if they aid in the retrieval of the filler, then their occurrence is predicted to be more essential in situations where there is no other available method of restoring the filler. This is not the case with visually presented stimuli which allow resolving a

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[1] A *Lingua* reviewer notes that repetition of the preposition only is not sufficient for deletion, as evident from the contrast between (i) and (ii):

(i)   dani   xašav   al   kol   kise   še-ben   gurion.   yašav   *(alav).
      Danny   thought   on   every   chair   that-Ben   Gurion   sat   on + it
      'Danny thought about every chair that Ben-Gurion sat on.'
(ii)   dani   amad/kafac/tipes   al   kol   kise   še-ben   gurion   yašav   (alav).
      Danny   stood/jumped/climbed   on   every   chair   that-Ben   Gurion   sat   on + it
      'Danny stood/jumped/climbed on every chair that Ben-Gurion sat on.'

Rather, for the preposition to be deleted it has to be identical to the overt preposition, and also to assign (in conjunction with the verb) the same thematic role to its complement as the overt preposition.

[2] As seen in (3), in Farby et al.'s sentences the verb was also repeated, i.e. the verb embedded in the relative clause was identical to the verb in the main clause. In our stimuli, we varied the verbs between the two positions.

filler-gap dependency rather easily, by simply re-reading the filler. It is therefore possible that this form of presentation would obviate the need for an RP in the relativized position, which may result in lower acceptability rates for sentences with RPs.

The aim of the current study was to continue to investigate the status of direct object resumptives in Hebrew, noting the limitations of Farby et al.'s (2010) study. As described below, the present experiment was designed to test two hypotheses regarding the source of the observed reduced acceptability of RPs compared to gaps: (1) that the reduced acceptability of RPs is due to the position of the relative clause within the main clause, namely the fact that the relative clause modifies the object, and thus the accusative marker is repeated, or (2) that the reduced acceptability is due to the modality of presentation, which was visual (i.e. written) in Farby et al.

To test hypothesis (1), in the current study direct object relatives were embedded under three different positions in the main clause: the subject position, the direct object position and the indirect object position. To test hypothesis (2), namely whether and how modality affects speakers' attitudes toward direct object resumptives, our survey incorporated 'modality' of presentation as a between-subjects variable.

For the purposes of this experiment, we aimed at creating sentences in which RPs were overall fairly natural. Our concern was that if sentences with RPs were judged as completely unacceptable, then our relatively minor experimental manipulations (i.e. modality and relative clause position) might not have any effect. We therefore used criteria from Ariel (1999) to generate structures where RPs are predicted to be relatively acceptable, namely structures where the head has low accessibility at the relativized position (see section 2.2 below).

2. Method

2.1. Participants

One hundred and eight adult native Hebrew speakers (67 female and 41 male, mean age = 28.3, range = 18–54) participated in this study. One hundred of them were monolingual and 8 were bilingual native speakers of Hebrew and Russian (4), English (2), Palestinian Arabic (1) or French (1). All participants had at least 12 years of education. None had any linguistic education relevant to the subject matter of the study.

2.2. Stimuli

Eighteen sets of Hebrew sentences with direct object relative clauses were prepared. Each set consisted of 6 sentences, diverging in the position of the noun which the relative clause modified (subject (SUB, 6a)/direct object (DO, 6b)/indirect object (IO, 6c)) and the occurrence of a resumptive pronoun or a gap in the relativized position. In all sentences, the relative heads were long (including an additional PP), the relativized positions were separated from the head by two embeddings, and the subject of the relative clause was a lexical NP, as exemplified in (6). As explained in section 1, this was done in order to create environments where the head has low accessibility at the relativized position, environments which in principle favor RPs to some degree, according to Ariel (1999).

(6)   a.   *ha-marce   le-filosofia   šel ha-mada   [še-ha-nasi   raca   lifgoš*
           the-professor   to-philosophy   of   the-science that-the-president wanted   to-meet
           (oto)   etmol   ba-kafiterya]   nasa   le-kenes
           him   yesterday   in-the-cafeteria   traveled   to-conference
           'The professor of the philosophy of science that the president wanted to meet
           yesterday in the cafeteria traveled to a conference.'

      b.   *ha-student ra'a   et   ha-marce   le-filosofia   šel ha-mada   [še-ha-nasi*
           the-student   saw   ACC   the-professor   to-philosophy   of   the-science that-the-president
           raca   lifgoš   (oto)   etmol   ba-kafiterya]
           wanted   to-meet   him   yesterday   in-the-cafeteria
           'The student saw the professor of the philosophy of science that the president
           wanted to meet yesterday in the cafeteria.'

      c.   *ha-student nasa   la-marce   le-filosofia   šel ha-mada   [še-ha-nasi*
           the-student   traveled to-the-professor to-philosophy of   the-science [that-the-president
           raca   lifgoš   (oto)   etmol   ba-kafiterya]
           wanted   to-meet   him   yesterday   in-the-cafeteria
           'The student traveled to the professor of the philosophy of science that the president
           wanted to meet yesterday in the cafeteria.'

Eighteen filler sentences which structurally resemble the experimental items were also prepared. All filler sentences included an embedded clause which was a complement to a head noun. In 6 of them this clause modified the main clause's subject, and in the rest it modified the main clause's direct object. Six items of the latter type also included indirect objects. Similarly to the experimental items, half of the filler sentences included a pronoun and half of them did not. An example of a filler sentence is given in (7). The complete list of experimental items and fillers is provided in the Appendix.

(7)   *ha-šmu'a   še-ha-marce   me-ha-merkaz   ha-bentxumi   over*
        the-rumor that-the-professor from-the-center the-interdisciplinary moves
        le-arcot   ha-brit hifti'a   et   ha-mazkira   me-ha-xug   le-psixologia
        to-united states surprised ACC the-secretary from-the-department to-psychology
        'The rumor that the professor from the interdisciplinary center is moving to the States surprised the secretary from the psychology department.'

For the auditory portion of the study, stimuli sentences were recorded by a male native Hebrew speaker. The maximum amplitude of the sound files was normalized to −1 dB and background noises were identified and removed using Audacity (http://audacity.sourceforge.net/).

A Latin square design was used to create 6 lists, each consisting of 18 experimental items of types 1–6 (3 of each) and the 18 filler items. Each list was randomized to create 3 different orders of presentation. Participants were randomly assigned to two groups: 54 participants were given a written survey and 54 participants were given an auditory one, such that 9 participants completed each list in each modality.

2.3. Procedure

Written survey. The questionnaires featured each sentence with a 1–7 scale and the descriptions 'not natural at all' and 'very natural' printed below the ratings 1 and 7, respectively. Participants were asked to circle the number which corresponded to the sentence's naturalness level. Instructions were given orally and also appeared on the top of each form.

Auditory survey. The auditory survey was constructed and run using E-prime 2.0 (PST, Inc.). Participants were seated in a quiet room in front of the computer. They were instructed to listen to each sentence and then press a number key between 1 and 7 which corresponded to the naturalness level of the sentence. The instructions were given to each participant orally and also appeared on the computer screen. Participants first heard the sentence while an icon which depicted listening appeared on the screen. A 1–7 scale and the descriptions 'not natural at all' and 'very natural' written below the ratings 1 and 7, respectively, then replaced the icon. Once the naturalness rating was provided, the listening icon appeared again and the next auditory stimulus item commenced.

3. Results

Results are presented in Table 1 and Fig. 1.

A by-participants $3 \times 2 \times 2$ repeated measures ANOVA with the within-subject factors 'relative clause position' (SUB/DO/IO) and 'occurrence of RP' (RP/Gap) and the between-subjects factor 'modality' (written/auditory) was carried out. The analysis yielded a significant main effect of RP occurrence (Gap M = 4.66, SD = 1.28, RP M = 4.24, SD = 1.32, $F (1, 106) = 23.982$, $p < .001$), such that the occurrence of an RP rendered items less acceptable than their gapped counterparts. Further, a main effect of relative clause position was found (SUB M = 4.9, SD = 1.25, DO M = 4.24, SD = 1.3, IO M = 4.19, SD = 1.27, $F (2, 212) = 40.389$, $p < .001$). Planned contrasts showed a significant preference for items with

Table 1
Mean (by-participants SD) auditory and written ratings by position and RP occurrence.

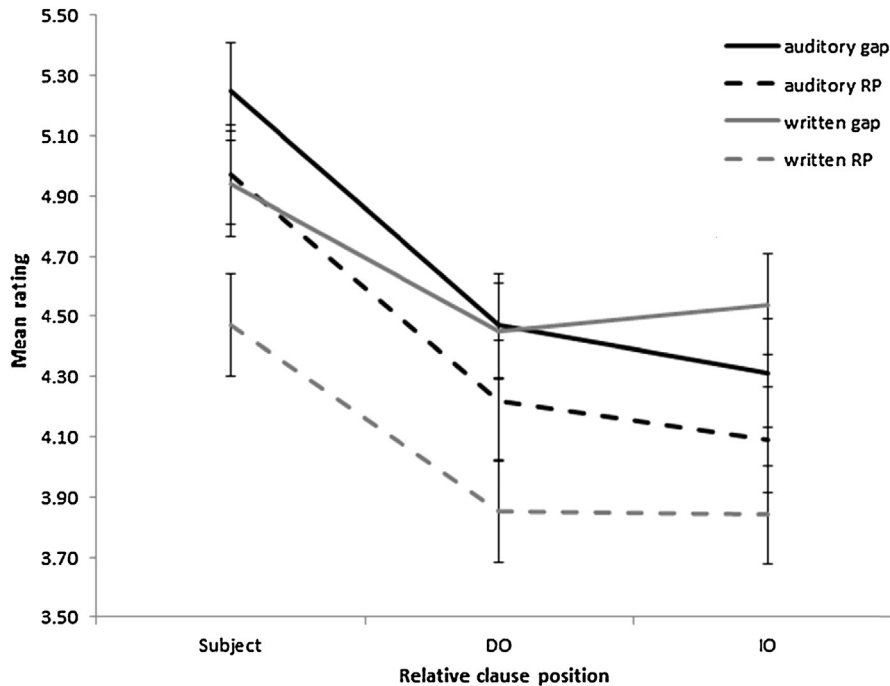|	Gap	RP
Written		
Sub	4.94 (1.27)	4.47 (1.26)
DO	4.45 (1.18)	3.85 (1.23)
IO	4.54 (1.23)	3.84 (1.18)
Auditory		
Sub	5.25 (1.20)	4.97 (1.21)
DO	4.47 (1.27)	4.22 (1.46)
IO	4.31 (1.32)	4.09 (1.29)

Fig. 1. mean auditory and written ratings by position and RP occurrence. *Note*: Error bars represent ±1 standard error.

subject modification over items with direct and indirect object modification (*p*'s < .001). The acceptability rates of items with direct and indirect object modification did not differ significantly (*p* = .566). There was no main effect of modality (*p* = .285).

In addition, we observed in this analysis a significant interaction between RP occurrence and modality (F (1, 106) = 4.002, *p* = .048). Post hoc analyses revealed the source of the interaction to be a stronger detrimental effect for RP occurrence in the written survey than in the auditory survey. In the written survey, gapped sentences were judged as significantly better than sentences with RPs (Gap M = 4.64, SD = 1.02, RP M = 4.05, SD = 0.97, F (1, 53) = 28.326, *p* < .001). In contrast, in the auditory survey this difference was only marginally significant (Gap M = 4.67, SD = 1.1, RP M = 4.43, SD = 1.09, F (1, 53) = 3.495, *p* = .067). There was no interaction between RP occurrence and position (*p* = .834), namely, sentences with RPs were judged as less acceptable than those with gaps to a similar degree across all relative clause positions.

A similar analysis by items with the variable 'modality' defined as a within-subjects factor again yielded a significant main effect for RP occurrence (F (1,17) = 28.364, *p* < 0.001), such that sentences with RPs were judged as less natural than those with gaps. In addition, there was again a main effect for relative clause position (F (2, 34) = 22.296, *p* < .001), with items with subject modification receiving higher ratings than items with direct object modification and indirect object modification (*p*'s < .001). The acceptability rates of items with direct and indirect object modification did not differ significantly in this analysis as well (*p* = .573).

We also observed a main effect of modality in this analysis (F (1, 17) = 8.103, *p* = .011), such that auditorily presented items were judged as more natural than written items (auditory M = 4.55, SD = 0.45, written M = 4.36, SD = 0.56). Post hoc comparisons between auditorily and visually presented items within each level of the variable 'RP' revealed a significant difference between the ratings of auditorily presented and visually presented RP items (auditory RP M = 4.43, SD = 0.43, written RP M = 4.07 SD = 0.43, t (17) = 3.902, *p* = .001), while the ratings of auditorily and visually presented gapped items did not differ significantly (auditory gap M = 4.67, SD = 0.44, written gap M = 4.65, SD = 0.53, t (17) = 0.219, *p* = .82). Thus, the main effect of modality does not reflect a general preference for auditorily presented items, but is rather driven by the higher ratings provided for RP items (as opposed to gapped items) when the form of presentation was auditory (as opposed to visual). Lastly, in this analysis, the interaction between RP occurrence and modality was only marginally significant (F (1, 17) = 4.180, *p* = .057). Nevertheless, it is interesting to note that post hoc comparisons between gapped sentences and sentences with RPs within each modality showed a pattern similar to the one revealed by the analysis by participants described above. In the written survey, gapped sentences were judged as significantly better than sentences with RPs (F (1, 17) = 30.317, *p* < .001), while in the auditory survey this difference was only marginally significant (F (1, 14) = 4.4, *p* = .051). There was again no interaction between RP occurrence and relative clause position (*p* = .860).

Finally, a 2 × 2 by-items repeated-measures ANOVA with the within-subjects factor 'modality' (visual/auditory) and the between-subjects factor 'experimental status' (experimental/filler) revealed a significant main effect for experimental status (Filler M = 6.41, SD = 0.25, experimental M = 4.45, SD = 0.41, $F (1, 34) = 328.589$, $p < .001$), such that filler items (i.e. items with non-relative embeddings) were rated significantly higher than experimental items. There was also a significant interaction between experimental status and modality ($F (1, 34) = 13.782$, $p = .001$), such that auditorily presented fillers were rated significantly lower than visually presented fillers (auditory M = 6.36, SD = 0.25, written M = 6.45, SD = 0.23, $t (17) = 2.47$, $p = .02$) whereas auditorily presented target items were rated significantly higher than visually presented target items (auditory M = 4.55, SD = 0.35, written M = 4.36, SD = 0.43, $t (17) = 2.84$, $p = .01$).

4. Discussion

The aim of the current study was to elucidate the factors which contribute to the decreased acceptability of direct object resumptive pronouns as compared to direct object gaps in Hebrew. We investigated the effect of two variables: position of the relative clause within the main clause (modifying the subject, direct object, or indirect object) and modality of presentation (visual or auditory).

First, it is interesting to note that all the experimental items, namely all sentences including relative clauses, whether with a gap or with an RP, were judged as less acceptable than the fillers, which did not include relative clauses. This may be due to the increased complexity associated with long-distance dependencies, and in particular those used in the experiment, in which the relativized position was considerably distant from the relative head, as explained above.

In line with Farby et al. (2010), we found that Hebrew speakers judge direct object resumptive pronouns as less natural than gaps (in non-island configurations). As shown above, while the preference for the gapped versions of the sentences was more pronounced when items were visually presented, they received higher ratings than the RP versions even when items were auditorily presented. Although the difference in rating was small (∼0.5 points on a 7-point scale), it was consistent and reliable. This suggests that in general, gaps and RPs are both acceptable, but that nonetheless, the alternation between gaps and RPs in direct object position is not completely free in Hebrew, as there is a slight preference for gaps. Given that in Ariel's (1999) corpus, 90% of object relative clauses included a gap and only 10% a resumptive, one might have expected a larger difference between the acceptability of gaps and that of resumptives. Note, however, that the 0.5 difference was obtained in our experiment using structures where, in principle, RPs are predicted to be relatively acceptable, as these structures include complex dependencies. For example, according to Ariel (1999), since the relative head is long, and since there is a long distance between the head and the relativized position (as well as an intervening lexical NP), these dependencies represented a case where the head has low accessibility at the relativized position. It is therefore possible that we would have obtained a larger difference between sentences with gaps and sentences with RPs had the dependencies been shorter and less complex.

While at present we do not have a definitive explanation for the degrading effect of RPs, we believe that Han et al. (2012) offer a promising direction. It is well known that movement is the default strategy for creating dependencies in natural languages, i.e. when readers/listeners encounter a filler, they actively search for a gap position in which to 'unload' it (see e.g. Love and Swinney, 1996; Phillips et al., 2005; Stowe, 1986; Sussman and Sedivy, 2003).[3] Given that in direct object relative clauses, such as those in our experiment, the resolution of the dependency takes place on the embedded verb, the resumptive element is in fact unnecessary, and its occurrence calls for a strategy shift; the initial parse of the structure as involving movement has to be changed, and a binding strategy has to be adopted instead. This strategy shift may incur processing costs, which in turn may result in lower acceptability judgments (e.g. Ferreira and Henderson, 1991; Sprouse, 2008). Thus, the slight decrease in acceptability with resumptive pronouns may reflect the mild processing difficulty associated with these structures. Future research should address this hypothesis by directly testing processing implications of resumption using online measures.

Importantly, we found an interaction between modality of presentation and occurrence of RP, such that the detrimental effect of resumption was stronger in the written modality than in the auditory one. One possible explanation for this is that in the case of auditory presentation, the adverse effect of resumption explained above is somewhat offset by a facilitation in processing offered by the RP. As mentioned in the introduction, there have been different suggestions in the literature as to how RPs aid in the processing of complex dependencies. Hawkins (2005) and Alexopoulou and Keller (2007) argue that in contrast to gaps, which require a cyclic movement analysis, RPs are interpreted by an anaphoric relation. The latter is less costly as it does not involve the creation and coindexation of intermediate traces. While a tenable explanation, this account does not straightforwardly predict a difference in acceptability between RPs in spoken and written sentences, as the cost incurred by intermediate traces is the same in both cases. Another line of reasoning is offered by Erteschik-Shir (1992), who

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[3] To date, this preference for positing gaps as soon as possible was only shown for languages with intrusive resumptive pronouns. Preliminary results from our group show, however, that such an active strategy in the formation of dependencies is operative in Hebrew as well.

proposes that if a lot of material intervenes between the filler and the purported gap position, the filler is erased from short-term memory, and in these cases, the presence of an RP can aid in its retrieval. Dickey (1996) and Asudeh (2004) similarly assume that the filler becomes inactive if the distance between the filler and the gap position is sufficiently large, and that this makes resumption acceptable, perhaps as the RP makes the phi-features of the filler available. This type of account can readily predict a differential effect of resumption in the auditory and visual modalities. While for visually presented sentences, the filler can always be retrieved by looking for it in the sentence, in auditory presentation the filler is no longer present, and the RP may help in retrieving it, by manifesting its basic features, i.e. phi-features. Similarly, Ariel's (1999) Accessibility Theory could accommodate the findings by assuming, quite naturally, that one of the factors determining the accessibility of the head at the relativized position is the modality of presentation, such that auditorily presented relative heads are less accessible than visually presented ones (as they are no longer physically available at the relativized position).

The present results are particularly interesting in view of studies conducted in English comparing the acceptability of RPs in spoken versus written sentences. Ferreira and Swets (2005), Han et al. (2012), and Polinsky et al. (2014) tested whether RPs are judged as more acceptable when sentences are presented auditorily than when they are presented visually. The studies all found no effect of modality, i.e. auditory presentation did not improve the acceptability of RPs. Similarly, Heestand et al. (2011) collected acceptability judgments on sentences with RPs presented visually word-by-word, at a rate of 400 msec per word. This presentation mode resembles auditory presentation, as the filler is not visually available at the gap position. These authors too did not find that RPs improve when processing requirements increase, in contrast to our findings. However, it is important to note that all the studies mentioned above investigated the acceptability of RPs inside islands (complex NP, adjunct and wh-islands). While some early proposals (e.g. Erteschik-Shir, 1992) treated RPs in islands and in long dependencies on a par, claiming that they facilitate processing in both structure types in the same way, recent studies provide reason to question this claim. Both Alexopoulou and Keller (2007) and Beltrama (2013) conducted large-scale judgment experiments which showed that the behavior of RPs patterns differently when they are inside islands as compared to dependencies with multiple embeddings, across several intrusive resumption languages. Alexopoulou and Keller (2007) argue that islands involve grammatical violations which give rise to strong unacceptability and are therefore unaffected by the processing facilitation offered by resumptives, in contrast to sentences with multiple embeddings, at least in intrusive resumption languages. This claim can explain the discrepancy between our results, where RPs were rated as more acceptable in auditory contexts, and those of the experiments in English mentioned above, where they were not. While the latter involved islands, which cannot benefit from the presumed facilitation offered by resumptives, our experiment included non-island environments, where RPs can indeed help in retrieving the filler when this is needed, i.e. when sentences are presented auditorily.

This processing-based explanation for the interaction between modality and resumption may seem inconsistent. Specifically, we have suggested in the beginning of this section that RPs are generally dispreferred since they necessitate a shift in strategy from movement to binding, and hence incur a processing cost. We later suggested that in the auditory modality, RPs provide an independent facilitation in processing. So which is it? Do RPs aid processing or hinder it? In fact, this duality in the analysis of RPs is present in many of the studies investigating them. Many researchers share the intuition that resumption aids processing. But if this is the case, why are they systematically judged as less acceptable than gaps in most environments? The answer which we can offer (see also Beltrama, 2013 and others) is that when RPs are not necessary (e.g. when the gap position is close to the relative head, or, in our case, when stimuli are presented visually), they have a degrading effect, perhaps due to increased processing cost. In contrast, when they have a processing function, they become less adverse. In our case, it is possible that in the auditory presentation condition, the movement strategy was not as successful (due to possible decay of the antecedent), and thus, the RP's effect was not adverse.

In contrast to the theories outlined above, several authors, e.g. Ferreira and Swets (2005) and Polinsky et al. (2014) argue that the facilitating function of RPs is limited to production. Following Kroch (1981), these authors propose that resumptives are used as a last resort in production, when the speaker started uttering a sentence and reached a point where a gap would not be possible (e.g. by entering an island). In fact, the reason why these authors conducted experiments comparing acceptability judgments of RPs in written and spoken sentences was to test the hypothesis that since resumption is a production phenomenon, and hence RPs appear mostly in spoken, rather than written, contexts, acceptability ratings will increase for RPs occurring in auditory stimuli. As noted above, these and other authors did not find the predicted effect in English, where modality did not interact with the acceptability of RPs. This led these authors to conclude that although RPs appear mostly in spoken registers, modality of presentation does not affect their perceived acceptability. An interesting question arises as to whether the effect of modality observed in our study can be attributed to the distribution of RPs in spoken versus written Hebrew (and whether this distribution differs from the distribution in English). Unfortunately, existing corpus studies do not include these data. Ariel's (1999) comprehensive corpus study of resumption in Hebrew includes only conversational data, and Prince's (1990) study of RP usage in English covers a heterogeneous corpus which includes casual and classroom discourse, as well as media broadcasts and segments of the New Testament, with no specification of data from the different sub-corpora. In the future, it will be important to establish whether resumption is indeed used in different proportions in spoken and written registers in different languages.

A final possible explanation for the interaction between modality and resumption appeals to a potential difference between spoken and written pronouns with regard to their class. Cardinaletti and Starke (1999) identify three classes of pronouns: clitics, weak and strong pronouns. Weak and strong pronouns are both free morphemes; however, they differ in several ways. Some differences are that only strong pronouns can be phonologically stressed or coordinated with another DP; only weak pronouns can refer to inanimates; and weak pronouns must be adjacent to the verbal head governing them. Laenzlinger and Shlonsky (1997) claim that Hebrew pronouns (e.g. *oto* 'him') are phonetically ambiguous between strong and weak forms. As exemplified in (8a), when the pronoun is stressed (hence strong), it cannot refer to an inanimate entity. When the pronoun is unstressed (8b), it can refer to either animates or inanimates (8b), but it cannot be separated from the verb (8c).

(8) a.   dan   ra'a   kanir'e   'OTO.   (strong pronoun)
          Dan   saw   probably   ACC.3ms
          'Dan probably saw him/*it.'
     b.   dan   ra'a   'oto   kanir'e.   (weak pronoun)
          Dan   saw   ACC.3ms   probably
          'Dan probably saw him/it.'
     c.   *dan   ra'a   kanir'e   'oto.   (weak pronoun)
          Dan   saw   probably   ACC.3ms

Moreover, Rizzi and Shlonsky (2007) argue that resumptive pronouns in Hebrew are weak pronouns, as they can refer to inanimate relative heads.[4,5] Given this, we can provide an additional possible account for why RPs in Hebrew exhibit decreased acceptability in written sentences. When a Hebrew spoken sentence with an RP is heard, the RP bears no stress, and this complies with its classification as a weak pronoun. In contrast, in the reading process, it is the reader who creates an implicit prosodic representation of the written text, and this representation can affect syntactic parsing (Bader, 1998; Fodor, 1998; Kentner, 2011). It is possible that when readers encounter the RP, they first assign it stress, and this results in an ungrammatical representation, in which a pronoun which is weak (according to its syntactic characterization) carries prosodic stress. There could be different reasons for why the pronoun would be assigned stress, despite its syntactic role. As noted by Nespor and Vogel (1989), speakers tend to avoid so-called lapses, namely long strings of unstressed syllables, which may result in assigning stress to otherwise unstressed elements, including pronouns and other function words (see Bader, 1998). Alternatively, when reading a sentence with a resumptive pronoun, since the dependency is resolved at the verb, the pronoun may not immediately be analyzed as the verb's complement (as this is redundant). Rather, it may be given an alternative interpretation, e.g. 'the same', beginning a modifier (as in *ha-yeled še-ha-more ra'a OTO boker* 'the boy that the teacher saw that same morning'), where it is stressed. At this point, these are merely conjectures based on our intuitions as Hebrew readers. In the future, it would be interesting to verify whether readers indeed tend to assign stress to pronouns in these environments, thus forcing a strong pronoun interpretation.

We now turn to discuss the findings with regard to the position of the relative clause within the main clause. We found no interaction between relative clause position and RP occurrence: RPs were degraded to a similar degree across all relative clause positions. This suggests that the findings in Farby et al. (2010) cannot be attributed to the repetition of the accusative marker. Resumptive pronouns are dispreferred also in relative clauses modifying subjects and indirect objects, where no accusative marker precedes the relative head.

However, rather surprisingly, we found a main effect of relative clause position, such that subject-modifying relative clauses were uniformly judged as better than object-modifying ones, regardless of the existence of a gap or an RP. Although unexpected, this finding is in line with Gibson et al. (2005), who found that object-modifying restrictive relatives are read more slowly than subject-modifying restrictive relatives. As noted by the authors, these results contradict the common claim that center embedded structures are harder to process than right-branching ones. To explain the advantage of subject-modifying relative clauses, Gibson and colleagues propose 'the information flow hypothesis', which states that background information is comprehended more easily early in a sentence. Consequently, restrictive relatives, conveying background information regarding the relative head, are easier to comprehend and therefore read more quickly

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[4] Note that this should not be confused with the concept of strong vs. weak resumption (e.g. Guilliot & Malkawi, 2006; Sichel, 2014). Weak resumption is instantiated by clitics, and manifests properties of movement (e.g. reconstruction effects), as exists for example in Lebanese Arabic. Strong resumption involves pronouns and manifests binding properties. Hebrew has strong resumption, but the resumptive element is a weak, rather than a strong, pronoun.

[5] Accounting for patterns of production and comprehension of RPs in Hebrew and Palestinian Arabic-speaking children with hearing impairments, Friedmann and Costa (2011) attribute the difference between the two groups to the fact that RPs in Arabic are clitics, whereas in Hebrew they are strong pronouns. The authors do not consider the possibility that resumptives in Hebrew are weak pronouns, but as far as we can see, their argument is not affected by adopting this assumption.

when they modify the main clause's subject. Returning to our own study, it seems that Gibson et al.'s 'information flow hypothesis' can account for the main effect of relative clause position we observed. Recall that our materials were presented without sentential or contextual cues that would set the type of modification they convey to non-restrictive. In the absence of such cues, there is strong evidence that the default interpretation of modifiers is restrictive (e.g. Grodner and Sedivy, 2011). In addition, in the auditory survey, our relative clauses were uttered to form one tone-group with the rest of the sentence, a sentential prosody pattern which indicates restrictive modification, as opposed to being realized as an independent tone-group, which indicates non-restrictive modification (Bache and Jakobsen, 1980; Watson and Gibson, 2004 and references therein). We therefore believe that our participants interpreted the relative clauses they were presented with as conveying restrictive modification. On a par with Gibson et al.'s hypothesis, this interpretation rendered our relative clauses more easy to comprehend when they appeared early in the sentence, which, in our study, resulted in higher acceptability ratings for the subject-modifying relatives, as compared to object-modifying relatives.

5. Conclusion

Our study set out to investigate the attitudes of Hebrew speakers toward direct object resumptive pronouns in relative clauses. In line with Farby et al. (2010) and Ariel (1990, 1999), we found that Hebrew speakers consistently judge these resumptives as slightly less natural than gaps. Following Han et al. (2012) we suggested that this decrease in acceptability is owing to a processing difficulty associated with these structures, due to a strategy-shift that is called for by the incorporation of a resumptive (instead of a gap) into the parse.

In addition, we found that modality is an influential factor in the acceptability of object RPs. Interestingly, we observed a significantly larger detrimental effect of RP occurrence in the written survey compared to the auditory survey. Following previous suggestions that resumptives aid the processing of complex dependencies (Asudeh, 2004; Dickey, 1996; Erteschik-Shir, 1992), we contemplated the possibility that our results may reflect the processing role of RPs. In contrast to dependencies presented in written form, auditorily presented complex dependencies cannot be resolved by finding the filler at an earlier point in the sentence. Consequently, auditorily presented RPs (but not visually presented ones) carry a facilitating role which offsets the adverse effect of resumption explained above, perhaps by virtue of making the phi-features of the filler available.

Another possible account for the interaction between modality and resumption that we considered attributed the weaker detrimental effect of auditorily presented RPs to a potential difference between spoken and written pronouns with regard to their class. Based on observations by Cardinaletti and Starke (1999) and Rizzi and Shlonsky (2007), we suggested that the modality effect we observed is due to an incorrect assignment of stress to written RPs, which are weak pronouns and therefore cannot be stressed, an assignment that readers make while constructing an implicit prosodic representation of the sentence. This type of mismatch between syntactic class and prosody would naturally not occur with auditorily presented stimuli.

As a whole, our study indicates that, not unlike intrusive resumption in languages such as English, the distribution, representation and processing of direct object resumptive pronouns in Hebrew is not as straightforward as is often assumed. The clear adverse effect of direct object resumption on acceptability together with the manner in which it interacts with modality raises numerous questions that need to be examined in future research designed to tap into the considerations guiding the on-line integration of these phrases into the parse.

Acknowledgments

Appendix A

Experimental sets.

1.

a) ‏המרצה לפילוסופיה של המדע שהנשיא רצה לפגוש (אותו / t) אתמול בקפיטריה נסע לכנס.

b) ‏הסטודנט ראה את המרצה לפילוסופיה של המדע שהנשיא רצה לפגוש (אותו / t) אתמול בקפיטריה.

c) ‏הסטודנט נסע למרצה לפילוסופיה של המדע שהנשיא רצה לפגוש (אותו / t) אתמול בקפיטריה

a) The professor of the philosophy of science that the president wanted to meet him/t yesterday in the cafeteria traveled to a conference.

b) The student saw the professor of the philosophy of science that the president wanted to meet him/t yesterday in the cafeteria.

c) The student traveled to the professor of the philosophy of science that the president wanted to meet him/t yesterday in the cafeteria.

2.

a) השחקנית ממרכז תל אביב שהבמאי החליט להעסיק (אותה / t) השנה בערוץ זכתה בפרס.

b) התאורן הכיר את השחקנית ממרכז תל אביב שהבמאי החליט להעסיק (אותה / t) השנה בערוץ.

c) התאורן התעניין בשחקנית ממרכז תל אביב שהבמאי החליט להעסיק (אותה / t) השנה בערוץ.

a) The actress from central Tel-Aviv that the director decided to employ her/t this year in the network received an award.

b) The lighting-guy knew the actress from central Tel-Aviv that the director decided to employ her/t this year in the network.

c) The lighting-guy asked about the actress from central Tel-Aviv that the director decided to employ her/t this year in the network.

3.

a) המורה מדרום הארץ שהתלמיד פחד לפגוש (אותה / t) היום במסדרון, נכנסה לכיתה.

b) אב הבית חיבק את המורה מדרום הארץ שהתלמיד פחד לפגוש (אותה / t) היום במסדרון.

c) אב הבית הצביע על המורה מדרום הארץ שהתלמיד פחד לפגוש (אותה / t) היום במסדרון.

a) The teacher (Fem.) from the south that the pupil was afraid to meet her/t today in the hallway entered the classroom.

b) The janitor hugged the teacher (Fem.) from the south that the pupil was afraid to meet her/t today in the hallway.

c) The janitor gestured toward the teacher (Fem.) from the south that the pupil was afraid to meet her/t today in the hallway.

4.

a) הכתב לענייני כלכלה שהמנכ"לית שקלה לפטר (אותו / t) אתמול בבוקר, חושש ממיתון.

b) המגיש קילל את הכתב לענייני כלכלה שהמנכ"לית שקלה לפטר (אותו / t) אתמול בבוקר.

c) החזאית התאהבה בכתב לענייני כלכלה שהמנכ"ליתשקלה לפטר (אותו / t) אתמול בבוקר.

a) The correspondent for matters of economics that the CEO (Fem.) considered firing him/t yesterday morning fears of a recession.

b) The reporter cursed the correspondent for matters of economics that the CEO (Fem.) considered firing him/t yesterday morning.

c) The weather-woman fell in love with the correspondent for matters of economics that the CEO (Fem.) considered firing him/t yesterday morning.

5.

a) השחיינית מארצות הברית שהסינית הצליחה לנצח (אותה / t) אתמול בתחרות, הודחה מהגמר.

b) המאמן ליטף את השחיינית מארצות הברית שהסינית הצליחה לנצח (אותה / t) אתמול בתחרות.

c) המאמן התגעגע לשחיינית מארצות הברית שהסינית הצליחה לנצח (אותה / t) אתמול בתחרות.

a) The swimmer (Fem.) from the U.S. that the Chinese (Fem.) managed to defeat her/t yesterday in the competition was eliminated from the finals.

b) The coach caressed the swimmer (Fem.) from the U.S. that the Chinese (Fem.) managed to defeat her/t yesterday in the competition.

c) The coach missed the swimmer (Fem.) from the U.S. that the Chinese (Fem.) managed to defeat her/t yesterday in the competition.

6.

a) הטכנאי מראשון לציון שהמנהל חשב לשבח (אותו / t) היום בישיבה, עובר לאילת.

b) המזכירה פגשה את הטכנאי מראשון לציון שהמנהל חשב לשבח (אותו / t) היום בישיבה.

c) המזכירה סטרה לטכנאי מראשון לציון שהמנהל חשב לשבח (אותו / t) היום בישיבה.

a) The technician from Rishon-lezion that the manager thought to praise him/t today at the meeting is moving to Eilat.

b) The secretary (Fem.) met the technician from Rishon-lezion that the manager thought to praise him/t today at the meeting.

c) The secretary (Fem.) slapped the technician from Rishon-lezion that the manager thought to praise him/t today at the meeting.

7.

a) הרקדנית למחול מודרני שהמאמן מתכנן לגייס (אותה / t) מחר בתחרות, נולדה בפריז.

b) המתעמל הצחיק את הרקדנית למחול מודרני שהמאמן מתכנן לגייס (אותה / t) מחר בתחרות.

c) המתעמל הסתודד עם הרקדנית למחול מודרני שהמאמן מתכנן לגייס (אותה / t) מחר בתחרות.

a) The dancer (Fem.) of modern dance that the coach is planning to draft her/t tomorrow at the competition was born is Paris.

b) The gymnast amused the dancer (Fem.) of modern dance that the coach is planning to draft her/t tomorrow at the competition.

c) The gymnast conspired with the dancer (Fem.) of modern dance that the coach is planning to draft her/t tomorrow at the competition.

8.

a) התייר מצפון אנגליה שהגנב ניסה לכייס (אותו / t) אתמול ברכבת, נסע לכינרת.

b) החיילת זכרה את התייר מצפון אנגליה שהגנב ניסה לכייס (אותו / t) אתמול ברכבת.

c) החיילת התנשקה עם התייר מצפון אנגליה שהגנב ניסה לכייס (אותו / t) אתמול ברכבת.

a) The tourist from northern England that the thief tried to pick-pocket him/t yesterday on the train traveled to the Kinneret.

b) The soldier (Fem.) remembered the tourist from northern England that the thief tried to pick-pocket him/t yesterday on the train.

c) The soldier (Fem.) kissed with the tourist from northern England that the thief tried to pick-pocket him/t yesterday on the train.

9.

a) הנהג מדרום הארץ שהנוסעים הצליח לדחוף (אותו / t) היום בנסיעה, עצר את האוטובוס.

b) הכרטיסן הצחיק את הנהג מדרום הארץ שהנוסעים הצליח לדחוף (אותו / t) היום בנסיעה.

c) הכרטיסן תמך בנהג מדרום הארץ שהנוסעים הצליח לדחוף (אותו / t) היום בנסיעה.

a) The driver from the south that the passengers managed to push him/t today during the ride stopped the bus.

b) The conductor amused the driver from the south that the passengers managed to push him/t today during the ride.

c) The conductor supported the driver from the south that the passengers managed to push him/t today during the ride.

10.

a) הטבחית מהמסעדה האיטלקית שהמארחת ניסתה לצבוט (אותה / t) היום במטבח, איחרה לפגישה.

b) המלצר הצחיק את הטבחית מהמסעדה האיטלקית שהמארחת ניסתה לצבוט (אותה / t) היום במטבח.

c) המלצר רקד עם הטבחית מהמסעדה האיטלקית שהמארחת ניסתה לצבוט (אותה / t) היום במטבח.

a) The cook (Fem.) from the Italian restaurant that the hostess tried to pinch her/t today in the kitchen was late for a meeting.

b) The waiter amused the cook (Fem.) from the Italian restaurant that the hostess tried to pinch her/t today in the kitchen.

c) The waiter danced with the cook (Fem.) from the Italian restaurant that the hostess tried to pinch her/t today in the kitchen.

11.

a) הכדורגלן מהנבחרת הלאומית שהבעלים מתכנן להחתים (אותו / t) מחר בבוקר, חלה בשפעת.

b) השופטת פסלה את הכדורגלן מהנבחרת הלאומית שהבעלים מתכנן להחתים (אותו / t) מחר בבוקר.

c) השופטת הסתכלה על הכדורגלן מהנבחרת הלאומית שהבעלים מתכנן להחתים (אותו / t) מחר בבוקר

a) The footballer from the national team that the owner plans to sign him/t tomorrow morning got the flu.

b) The judge (Fem.) eliminated the footballer from the national team that the owner plans to sign him/t tomorrow morning.

c) The judge (Fem.) looked at the footballer from the national team that the owner plans to sign him/t tomorrow morning.

12.

a) המתאבק ממדינת קליפורניה שהקהל התאמץ לראות (אותו / t) אתמול בזירה, נפצע בראשו.

b) המעריצה הטרידה את המתאבק ממדינת קליפורניה שהקהל התאמץ לראות (אותו / t) אתמול בזירה.

c) המעריצה רדפה אחרי המתאבק ממדינת קליפורניה שהקהל התאמץ לראות (אותו / t) אתמול בזירה.

a) The wrestler from the state of California that the audience struggled to watch him/t yesterday at the ring got a head injury.

b) The fan (Fem.) bothered the wrestler from the state of California that the audience struggled to watch him/t yesterday at the ring.

c) The fan (Fem.) chased after the wrestler from the state of California that the audience struggled to watch him/t yesterday at the ring.

13.

a) המומחה לעיצוב מטבחים שהשף יתחיל לקדם (אותו / t) מחר בתכנית, נוהג במרצדס.

b) המפיקה מעריכה את המומחה לעיצוב מטבחים שהשף יתחיל לקדם (אותו / t) מחר בתכנית.

c) המפיקה יוצאת עם המומחה לעיצוב מטבחים שהשף יתחיל לקדם (אותו / t) מחר בתכנית.

a) The specialist for kitchen design that the chef will start to promote him/t on the show tomorrow drives a Mercedes.

b) The producer (Fem.) appreciates the specialist for kitchen design that the chef will start to promote him/t on the show tomorrow.

c) The producer (Fem.) dates the specialist for kitchen design that the chef will start to promote him/t on the show tomorrow.

14.

a) המלבישה מנווה צדק שהמנחֶה תכנן להזכיר (אותה / t) אתמול בתכנית, התפטרה בזעם.

b) הצלם מחבב את המלבישה מנווה צדק שהמנחֶה תכנן להזכיר (אותה / t) אתמול בתכנית.

c) הצלם פטפט עם המלבישה מנווה צדק שהמנחֶה תכנן להזכיר (אותה / t) אתמול בתכנית.

a) The wardrobe lady from Neve-Tzedek that the TV host planned to mention her/t yesterday on the show resigned angrily.

b) The photographer likes the wardrobe lady from Neve-Tzedek that the TV host planned to mention her/t yesterday on the show.

c) The photographer chatted with the wardrobe lady from Neve-Tzedek that the TV host planned to mention her/t yesterday on the show.

15.

a) היזם מצפון תל אביב שהממשלה מתכוונת לקנוס (אותו / t) מחר בוועדה, ירד מהארץ.

b) השרה מחבבת את היזם מצפון תל אביב שהממשלה מתכוונת לקנוס (אותו / t) מחר בוועדה.

c) השרה נזהרה מהיזם מצפון תל אביב שהממשלה מתכוונת לקנוס (אותו / t) מחר בוועדה.

a) The entrepreneur from northern Tel-Aviv that the government plans to fine him/t tomorrow in the committee left the country.

b) The minister (Fem.) likes the entrepreneur from northern Tel-Aviv that the government plans to fine him/t tomorrow in the committee.

c) The minister (Fem.) was careful (verb) of the entrepreneur from northern Tel-Aviv that the government plans to fine him/t tomorrow in the committee.

16.

a) החוואי מצפון דקוטה שהסוחר התכוון לרמות (אותו / t) אתמול בייריד, הפסיד בהגרלה.

b) הרפתנית העריצה את החוואי מצפון דקוטה שהסוחר התכוון לרמות (אותו / t) אתמול בייריד.

c) הרפתנית בישלה לחוואי מצפון דקוטה שהסוחר התכוון לרמות (אותו / t) אתמול בייריד.

a) The farmer from north Dakota that the merchant intended to cheat him/t yesterday at the fair had lost in the raffle.

b) The milk-maid admired the farmer from north Dakota that the merchant intended to cheat him/t yesterday at the fair.

c) The milk-maid cooked for the farmer from north Dakota that the merchant intended to cheat him/t yesterday at the fair.

17.

a) היהלומן מדרום אפריקה שהצורף מתכנן להכיר (אותו / t) מחר בתערוכה, מדבר לאט ובלחש.

b) המעצבת שונאת את היהלומן מדרום אפריקה שהצורף מתכנן להכיר (אותו / t) מחר בתערוכה.

c) המעצבת פלירטטה עם היהלומן מדרום אפריקה שהצורף מתכנן להכיר (אותו / t) מחר בתערוכה.

a) The jeweler from south Africa that the goldsmith plans to meet him/t tomorrow at the expo talks slowly and softly.

b) The designer (Fem.) hates the jeweler from South Africa that the goldsmith plans to meet him/t tomorrow at the expo.

c) The designer (Fem.) flirted with the jeweler from South Africa that the goldsmith plans to meet him/t tomorrow at the expo.

18.

a) הימאי מהצי הסוחר שרב החובל התכוון להעניש (אותו / t) מחר בהפלגה, נעלם מהספינה.

b) התצפיתנית חיפשה את הימאי מהצי הסוחר שרב החובל התכוון להעניש (אותו / t) מחר בהפלגה.

c) התצפיתנית התיידדה עם הימאי מהצי הסוחר שרב החובל התכוון להעניש (אותו / t) מחר בהפלגה.

a) The seaman from the merchant fleet that the captain planned to punish him/t tomorrow at the sailing vanished from the ship.

b) The lookout (Fem.) sought the seaman from the merchant fleet that the captain planned to punish him/t tomorrow at the sailing.

c) The lookout (Fem.) made friends with the seaman from the merchant fleet that the captain planned to punish him/t tomorrow at the sailing.

Fillers

1) השמועה שהמרצה מהמרכז הבינתחומי עובר לארצות הברית הפתיעה את המזכירה מהחוג לפסיכולוגיה.
2) העובדה שהשכר החציוני במשק נמוך מאי פעם ציערה את הבן של שר האוצר החדש.
3) הטענה עתיקת היומין שמסוכן לשתות מים אחרי אכילת אבטיח הופרכה מספר פעמים בהסטוריה.
4) הרעיון ללכת הביתה בדרך הקצרה יותר עלה בראשו של המדריך כשהוא כבר היה באמצע הדרך.
5) ההודעה על המחלה הפתאומית של ראש הלשכה תפסה את המנכ"ל באמצע ישיבה חשובה.
6) ההסכם שילדיו יגורו אצל אימם חצי מהזמן ואצלו חצי מהזמן היה מקובל על רואה החשבון.
7) הטרמפיסטית מצפון הארץ חשבה שזה רעיון טוב לחכות בצומת גולני באמצע הלילה.
8) השכן מהקומה השלישית תכנן שההרחבה של המרפסת שלו לא תעלה יותר מ50 אלף שח.
9) הרב מבית הכנסת הגדול מאמין שתפילה שבאה מעומק הלב היא המועילה ביותר.
10) המורָה למתמטיקה מהתיכון החדש החליטה שממחר היא תבדוק נוכחות בכל שיעור.
11) הדוור מסניף זמנהוף התלונן שמאד חם במדי הפוליאסטר בחודשי הקיץ.
12) השוטר ממרחב ירקון הודיע שצריך לסגור את רחוב אלנבי בשל התרעה על חפץ חשוד.
13) הגננת מהגן ממול צעקה על בעלה שהיא לא אוהבת את האופן שבו הוא מנקה את הבית.
14) המהנדס מהמשרד לתכנון העיר התפאר בפני עובדיו שהוא אחראי לחצי מהמבנים בשדרות רוטשילד.
15) שגריר האו"ם למזרח התיכון הבהיר לחברי הוועדה שעמדתו לא השתנתה בשנים האחרונות.
16) ראש הממשלה הטרי הבטיח לציבור הבוחרים ששכר המינימום יעלה בשנת המס הבאה.
17) הכלה הנרגשת מגבעתיים הראתה לשושבינות שהשמלה שלה לא תפורה טוב מאחור.
18) החשוד המרכזי בפרשה המפורסמת הצהיר בפני חבר המושבעים שבזמן הרצח הוא היה בעבודה.

1) The rumor that the professor from the interdisciplinary center is moving to the States surprised the secretary from the psychology department.
2) The fact that the median wage is the lowest ever made the son of the new minister of finance very upset.
3) The ancient claim that it's dangerous to drink water after eating watermelon was refuted many times in history.
4) The idea to take the shorter way home occurred to the instructor when he was halfway to his destination.
5) The notification about the sudden illness of the Head of the Bureau caught the CEO in the middle of an important meeting.
6) The agreement that his kids would stay with their mother some of the time and with him some of time was fine with the accountant.
7) The hitchhiker from northern Israel thought that waiting at Golani intersection in the middle of the night is a great idea.
8) The neighbor from the third floor planned that the extension to his new balcony would not cost more than 50 thousand shekels.
9) The rabbi from the great synagogue believes that a prayer that comes from the heart is the most effective one.
10) The mathematics teacher from the new high school decided to check attendance in each class starting tomorrow.
11) The postman from the Zamenhof branch complained that it gets really hot in his polyester uniform during the summer.
12) The officer from the Yarkon district announced that Allenby street needs to be closed due to a bomb threat.
13) The kindergarten teacher from the kindergarten across the street yelled at her husband that she doesn't like the way he's cleaning the house.
14) The engineer from the office of city planning bragged to his employees that he is responsible for half of the buildings in Rothschild boulevard.
15) The UN ambassador to the middle east clarified to the committee members that his position did not change in the last few years.
16) The new prime minister promised his electorates that the minimum wage will be raised in the next tax year.
17) The blushing bride from Givatayim showed her bridesmaids that her dress is not sewn properly in the back.
18) The main suspect in the famous case declared to the jury that he was at work while the murder was taking place.

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