

The Acceptability of Resumptive Pronouns in Hebrew

Hebrew relative clauses have two grammatical derivations: one, by *wh*-movement, leaving a trace (*t*) behind (trace-relatives, (1)); and the other with a resumptive pronoun (RP) (resumptive relative, (2)) (Doron, 1982; Shlonsky, 1992). In this study, we compare the acceptability of RPs and traces in three environments: close to the relative head, in complex NP islands, or separated from the head by an additional CP level. We provide experimental evidence for the acceptability patterns of RPs in relative clauses, to test different hypotheses regarding their nature.

One hypothesis regarding the use of RPs close to the head of the relative clause is that they refer to a specific discourse entity (Erteschik-Shir, 1992). Given a set of alternatives (introduced by Focus in the relative clause), the RP marks a specific selection of one entity from the focus set. Thus, focus-RPs can be characterized as similar to traces, since they appear only to enforce the specificity required by the focus, and hence they are generated by the grammar for such contexts. This use of RPs is contrasted with two other types of RPs which are more pronominal, and not syntactic: RPs that are separated from the relative head by an island, and RPs that appear at some distance from the relative head. In the former case, RPs are predicted to be acceptable in island domains, since they are not subject to locality constraints (i.e. they are not derived by *wh*-movement (Friedmann, 2008)). In the latter case, RPs spell out ϕ -features of the antecedent which are covert in traces; therefore, they facilitate the process of reference to their antecedent over distance.

Conversely, RPs can be considered on a par with pronouns in all environments. Thus, a competing hypothesis for the use of RPs compares them to the use of traces on a general hierarchy of referring expressions, based on their accessibility. The Accessibility Hypothesis (Ariel, 1999) predicts that speakers will prefer trace-relatives when referring to salient discourse entities, because empty categories are ranked higher on the accessibility hierarchy than pronouns. We report results from two studies designed to test these predictions.

In experiment 1, 25 native speakers of Hebrew were presented with 10 contexts such as in (3), each followed by 4 declarative sentences, including a trace-relative and a resumptive relative. The discourse contained a minimal contrast between two entities, one of which was picked out as the antecedent of both *t* and RP, as in (4). Another condition in this experiment was represented by sentences with a complex-NP island, one with *t* and one with RP, as in (5). The task was to rate the acceptability of each sentence within the given context on a scale from 1 to 5. Results (Fig. 1) show that trace-relatives are rated significantly higher than resumptive relatives, $t(24)=5.3$ $p<0.0001$ (Tukey adjustment), when referring to a salient discourse entity. This preference is reversed when the trace violates a syntactic constraint: within island domains, RPs are significantly more acceptable than traces, $t(24)=-3.43$ $p<0.05$ (Tukey adjustment).

One possible explanation for these results is that since speakers were presented with all types of stimuli, the sentences are rated relative to each other. Hence, in experiment 2, the same relatives as in (4) were presented with the same context, but in a Latin square design ($N=90$ participants), so that only one sentence

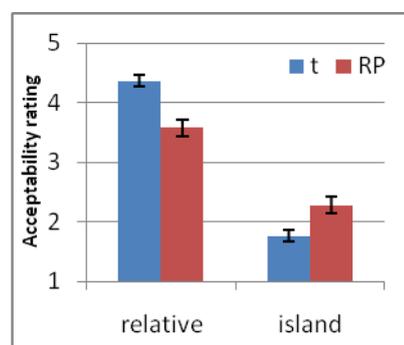


Figure 1. Mean ratings of relatives and islands with trace and RP

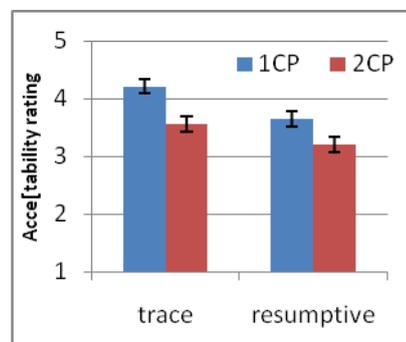


Figure 2. Mean ratings of trace/resumptive relatives with 1CP or 2CPs separating the head and *t*/RP position

was presented to each speaker following each context. Two conditions were presented contrasting trace and resumptive relatives, with 1 or 2 CPs separating the relative head from t/RP (6). The results (Fig 2) show that distance affects only trace relatives: 1CP were rated significantly higher than 2CPs, $t(89)=-3.79$ $p<0.01$ (Tukey adjustment). The difference between resumptive relatives with 1CP/2CPs was not statistically significant. In summary, results for relatives in which t/RP are close to the head were replicated, suggesting that rating responses in experiment 1 were independent for each relative. Moreover, results for the 2CP condition lend further support to the similarities of RPs to regular pronouns, since their acceptability is not affected by their distance from the antecedent.

The results from experiment 1 and 2 show that Hebrew speakers prefer trace-relatives over resumptive-relatives across the board, except within island domains. This suggests that RPs resemble regular pronouns. First, when t/RP appear close to the head, the higher acceptability associated with trace relatives indicates that speakers prefer empty categories over pronouns in referring to salient discourse entities, as predicted by the accessibility hierarchy. Second, trace-relatives decrease in acceptability when the trace is separated by an additional CP from the relative head; this decrease is expected since the interpretation of the trace is dependent on its association with the relative head. The head is kept active in working memory up to the trace (object) position, so longer distance means lower acceptability (Gibson, 1998; Alexopoulou & Keller, 2007). Resumptive relatives do not show the same dependency on distance, suggesting that their association with the relative head is made by a different mechanism, similar to pronoun resolution, as predicted in Erteschik-Shir (1992). Finally, as theories of locality predict, the acceptability of RPs in island domains is significantly better than traces, since they are not derived by movement; nevertheless, the fact that speakers rate islands with RPs quite low (2.28) suggests that the constraint on the dependency crossing a complex NP may not be derivational but representational in nature.

(1) Hine ha- simla_i Se- kaniti t_i (Erteschik-Shir, 1992, 14a)

Here (is) the dress_i that bought.1sg t_i

(2) Hine ha- simla_i Se- kaniti ota_i (ibid., 14b)

Here (is) the dress_i that bought.1sg it_i

(3) Example context: Dina (a bride) wants to buy a dress that a famous designer (Alon) actually sowed himself in a particular bride-salon (salon "Shoshi"). This dress is selected from other dresses presented in the salon, which he designed, but were sowed by his students. Tal is Dina's friend.

(4) a. Dina roca liknot et ha-simla_i Se Alon tafar t_i be salon "SoSi".

Dina wants to buy the dress_{i,acc} that Alon sowed t_i at salon Shoshi

b. Dina roca liknot et ha-simla_i Se Alon tafar ota_i be salon "SoSi".

Dina wants to buy the dress_{i,acc} that Alon sowed it_i at salon Shoshi

(5) a. *Dina roca liknot et ha-simla_i Se ha-me'acev Se tafar t_i be-salon SoSi yadu'a be-Tel Aviv.

Dina wants to buy the dress_{i,acc} that the designer that sowed t_i at salon Shoshi is-known in Tel Aviv

b. ?Dina roca liknot et ha-simla_i Se ha-me'acev Se tafar ota_i be-salon SoSi yadu'a be-Tel Aviv.

Dina wants to buy the dress_{i,acc} that the designer that sowed it_i at salon Shoshi is-known in Tel Aviv

(6) a. Dina roca liknot et ha-simla_i Se Tal siper Se Alon tafar t_i be salon "SoSi".

Dina wants to buy the dress_{i,acc} that Tal told that Alon sowed t_i at salon Shoshi

b. Dina roca liknot et ha-simla_i Se Tal siper Se Alon tafar ota_i be salon "SoSi".

Dina wants to buy the dress_{i,acc} that Tal told that Alon sowed it_i at salon Shoshi

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