(In)sensitivity to surface-level heuristics: A case from Turkish verbal attractors

Utku Turk[a,*]

[a]University of Maryland, College Park, Linguistics, Marie Mount Hall, College Park, 20742

Abstract

We ask whether surface-form overlap alone can elicit agreement attraction or whether attraction requires morphosyntactic features that (possibly) license controllerhood. Turkish provides a test case because the plural morpheme *-lAr* appears on both nouns and verbs, but only nominal *-lAr* can control verbal agreement. In two speeded acceptability experiments with Turkish, we show that the association with being a possible controller is needed for surface-level heuristics to kick in. In Experiment 1 (N = 80) we used reduced relative clauses whose verb bore *-lAr* as potential verbal attractors and compared ungrammatical sentences with plural vs. singular verbal attractors. Ungrammatical sentences with a plural-marked verbal attractor were not judged more acceptable than those with a singular verbal attractor. In Experiment 2 (N = 95) we replicated the verbal manipulation and added genitive-marked nominal attractors; nominal plural attractors produced robust attraction, but verbal plural attractors did not. The within-experiment distribution influenced baseline acceptability, yet it did not create attraction for verbal attractors. The results indicate that surface similarity alone is insufficient. Attraction depends on abstract feature overlap with elements that can serve as agreement controllers, not on the presence of a homophonous plural morpheme on a non-controller.

Keywords: form-sensitivity, memory, agreement attraction

1. Introduction

Sentence processing is shaped not only by grammatical constraints but also by plausibility, frequency, task-specific factors, and phonological processes. Recent work shows that such influences can substantially modulate reading and judgment behavior (Laurinavichyute and von der Malsburg, 2024; Arehalli and Wittenberg, 2021; Hammerly et al., 2019; Logačev and Vasishth, 2016). Form-based overlap between elements in a sentence can also influence how sentences are processed. A substantial body of work has shown that the parser and the production system are sensitive not only to syntactic or semantic relations but also to the surface form of words. These effects have been taken to suggest that, under certain circumstances, speakers and comprehenders rely on shallow or heuristic cues to complete dependencies. Acheson and MacDonald (2011), for example, found that participants showed slower reading times when the subjects of the two embedded clauses share phonological similarity (*baker-banker* in 1 vs. *runner-banker* in 2). Moreover, participants were less accurate in answering comprehension questions with phonological overlap present. Related work in short-term memory and word recognition shows similar effects—items that overlap phonologically or morphologically are more confusable and more easily retrieved (Copeland and Radvansky, 2001; Rastle and Davis, 2008).

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*Corresponding author

   Email address: `utkuturk@umd.edu` (Utku Turk)

(1) The baker that the banker sought bought the house.

(2) The baker that the banker sought bought the house..

- Here I should put Kush actually debunked this.

One domain in which these influences are observed is the research on agreement attraction as in (3), a phenomenon in which a verb erroneously agrees with a nearby noun rather than its grammatical subject, producing so-called grammaticality illusions (Bock and Miller, 1991; Pearlmutter et al., 1999). This effect have been robustly attested in many languages with various methodologies [to name a few]. Bock and Eberhard (1993) tested whether attractors that only sound plural, pseudoplurals such as *course* 4a, increase agreement errors compared to true plural nouns (4c). They reasoned that if participants rely on phonological cues rather than abstract features, words ending with plural-like sounds (/s/ or /z/) should behave like true plurals. Participants completed sentence preambles such as (4), where the head noun (*player*) was singular but the attractor varied in form. They found that pseudoplural attractors did not increase plural agreement rates.

(3) * The player on the courts are tired from a long-game.

(4) a. Pseudoplural Attractor
        The player on the course …
     b. Singular Attractor
        The player on the court …
     c. Plural Attractor
        The player on the courts …

Even though modulation from a pure phonological similarity was not found, several experiments have manipulated morphological case similarity between controllers and attractors, reasoning that syncretism or surface ambiguity could enhance competition during retrieval or interfere in production [PAPERS]. For example, Hartsuiker et al. (2003) used the overlap between accusative and nominative forms of feminine determiners in German and compared these ambiguous forms to distinctively marked dative forms. Participants produced more agreement errors when the preambles contained two noun phrases whose determiners were not distinctively marked, as in (5a), compared to cases where the attractor could be distinguished by form alone, as in (5b). Crucially, this additive effect was limited to feminine nouns, the only gender showing nominative–accusative syncretism in plural forms while other nouns showed the base effect of plural.

(5) a. Die   Stellungnahme gegen die   Demonstration-en
        the.F.NOM.SG position   against the.F.ACC.PL demonstration-PL
        'The position against the demonstrations'
     b. Die   Stellungnahme zu den   Demonstration-en
        the.F.NOM.SG position   on the.F.DAT.PL demonstration-PL
        'The position on the demonstrations'

Similar effects of surface similarity are also found in comprehension studies. Slioussar (2018), for example, showed that phonological overlap affects the reading pattern and accuracy of participants in Russian agreement. A group of accusative marked nouns in Russian surfaces ambiguously with their nominative counterparts when they are plural (6a-6b). Meanwhile, it is possible to assign a different case to the attractors using a different preposition as in (6c-6d). Crucially, in her experiment the genitive marked plural nouns were not ambiguous with their nominative counterparts. Slioussar (2018) showed that participants not only exhibited faster reading times at the verb in (6b) compared to (6a), but also judged sentences with a plural attractor as grammatical more often. These effects of plural attractor were only present in cases with ambiguous case marking.

(6) a. ssylka   na sajt   byli dany.
       link[NOM.SG] to website[ACC.SG(≠NOM.PL)] were given

    b. ssylka   na sayty   byli dany.
       link[NOM.SG] to website[ACC.PL(=NOM.PL)] were given

       'The link to the website(s) were given.'

    c. material   dlja kryşi   byli brakovannymi.
       material[NOM.SG] for roof[GEN.SG(=NOM.PL)] were defective

    d. material   dlja kryş   byli brakovannymi.
       material[NOM.SG] for roof[GEN.PL(≠NOM.PL)] were defective

       'The material for the roof(s) were defective.'

However, a more intriguing aspect of the study by Slioussar (2018) is her results with respective to attractors marked with genitive singular. Another interesting characterics of Russian is such that a subset of *singular* genitive nouns share the same form with their plural nominal counterpart. In addition to plural nouns not increasing grammatical judgments to ungrammatical sentences and not creating a reading advantage, the verbs of singular attractors were read faster and resulted in more 'yes' responses to grammaticality judgments. In this aspect, the findings of Slioussar (2018) differs from previous syncretism findings and targets the initial question raised by Bock and Eberhard (1993): whether the pure phonological similarity, without any contribution from an abstract plural feature, can drive the agreement attraction effects.

Slioussar (2018) assumed cue-based retrieval model in which attraction effects originates from erroneous retrievals of an agreement controller. Under this approach, phrases are encoded in a content-addressable memory as bundles of features called *chunks* which include information like, number, gender, morphophonological case, and syntactic information (Smith and Vasishth, 2020; Lewis and Vasishth, 2005). Participants predict the number of the verb based on the noun phrases they process while reading the previous noun phrases. In grammatical sentences with singular verb agreement, the number prediction and the verb number match, which causes no processing difficulty. In contrast, when participants fail to find the predicted number morphology on the verb, a memory-retrieval process is initiated. This process activates the search for a chunk matching relevant cues for agreement controller. Slioussar (2018) argued that the search for a controller can be mediated through possible forms of nouns with relevant features like, NOM case, PL number, as well as structural cues.

In ungrammatical sentences like (6b), while neither of the available noun phrases fully matches this specification in ungrammatical agreement attraction sentences, each of the NPs headed by *link* and *websites* matches a subset of cues. Importantly, in (6c) as well, a partial match is also possible. Even though the NP headed by *roof* is not plural, due to phonological overlap, Slioussar (2018) argues, a subset of features relevant for agreement, i.e. +NOM and +PL, is erroneously activated. While this partial match scenarios mostly results in participants finding the sentence ungrammatical, they may occasionally retrieve the attractors, *websites* or *roof*, as controllers on some trials.

An alternative account that does not depend on activation of relevant features by phonology would depend on encoding of distributional facts as statistical heuristics. In such an account, instead of relying on activation of features through a phonological route, participants would probabilistically associate certain strings, such as genitive marked NP or overt D head, with being an agreement controller. Indeed, similar explanations for syncretism or subject-likeness phenomenon has been reported. For example, Lago et al. (2019) argued that participants can retrieve a noun as the controller if the noun is marked with a case marking that may sometimes control agreement in a language even if that is not the case for the specific sentence. They used Turkish genitive case, which can control the agreement in embedded sentences but not in matrix sentences. They took the presence of attraction effects in Turkish as an indication that Turkish speakers utilize overt genitive-case's association with subjecthood. In a sense, phonological, not functional, syncretism between the marking on the nominal modifier and the embedded subject resulted in attraction. A similar account from Dillon and colleagues was pushed for sensitivity for looking like a controller in languages like

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Romanian and Hindi (Bhatia and Dillon, 2022; Bleotu and Dillon, 2024). For instance, Bleotu and Dillon (2024) manipulated whether the attractor surfaces with a determiner or in its bare form. Importantly, they note that only nouns with determiners can control agreement in Romanian. They found that Romanian attractors only induced attraction effects when both attractor and the head surfaced with a determiner. They took these results to suggest that participants associated presence of a determiner or related feature with the agreement controller, and attraction only surfaces when subject heads and the attractor look alike. Similarly, Schlueter et al. (2018) argue that and can cause agreement attraction effects in English even when it does not create a plurality because it is associated with the plural feature statistically. Such explanations are based on the assumption that the match between a cue and a chunk does not have to be categorical, but it can be influenced by surface level statistical association (Engelmann et al., 2019).

A similar account can also be proposed for Russian findings. Genitive marked nouns can be subjects in negative inversion constructions in Russians. However, when they are subjects, they cannot control the agreement. In other cases, they can be the controller of number or gender marking on adjectival relative clauses. Given this possibility of an alternative account, the contention of initial findings of Bock and Eberhard (1993), and the theoretical importance of the empirical generalization, we test whether pure phonological overlap can derive agreement attraction effects in two high-powered speeded acceptability judgment experiments. To this end we use Turkish, a language where verbal and nominal plural marking share the same surface form, the suffix –lAr. We use reduced relative clause (RRC) structures, in which the verb with the plural marking alone can appear as the attractor (7). Importantly, Turkish –lAr syncretism here is not feature-ambiguous (as in cases of syncretism); it is a form-only overlap that does not share possible argument status with the subject. Even when the RRC can surface without its head as the subject, they cannot control the agreement (8).

(7) Gör-dük-ler-i   çocuk   koş-tu-(*lar).
     go-NMLZ-PL-POSS kid[NOM] run-PST-(*PL)

     'The kid that (they) saw ran.'

(8) Gör-dük-ler-i   koş-tu-(*lar).
     go-NMLZ-PL-POSS run-PST-(*PL)

     '(The kid) that (they) saw ran.'

In Experiment 1, we tested the form hypothesis directly by comparing ungrammatical sentences with verbal-plural vs. verbal-singular attractors. Experiment 2 replicated this design but included additional nominal-attractor items from a previous Turkish attraction study (Türk and Logačev, 2024), allowing us to test whether the distribution of item types and the presence of genuine attraction-inducing elements modulates the outcome. Across both experiments, we found no evidence that verbal –lAr induces attraction, even when canonical nominal attractors are present in the same session. This pattern aligns with prior findings in general attraction literature and Turkish agreement attraction, namely surface-form overlap alone does not derive agreement illusions. Rather, attraction appears to depend on abstract feature overlap between potential controllers and agreement probes, and possibly statistical associations between the strings and their controllers. In this lights, findings of Slioussar (2018) are best analyzed as a possible increased association between genitive marking and possible subjecthood and being an agreement controller. By doing so, we hope to clarify how cue-mechanisms are employed and the role of phonological overlap in sentence processing.

2. Experiment 1: Testing Form-Driven Processing

2.1. Participants

We recruited 80 undergraduate students to participate in the experiment in exchange for course credit. All participants were native Turkish speakers, with an average age of 21 (range: 18 – 31). The experiment was carried out following the principles of the Declaration of Helsinki and the regulations concerning research

ethics at Bogazici University. All participants provided informed consent before their participation and their identities were completely anonymised.

2.2. Materials

We used 40 sets of sentences like (9), in which we manipulated (i) the number of the attractor and (ii) the number agreement on the verb. Both plural markings were marked with the suffix -ler/-lar, while the singular number and singular agreement were marked by its absence.

(9) a. Tut-tuğ-u   aşçı   mutfak-ta   sürekli   zıpla-dı.
       hire-NMLZ-POSS cook[NOM] kitchen-LOC non.stop jump-PST
       'The cook they hired$_{sg}$ jumped$_{sg}$ in the kitchen non-stop.'

   b. * Tut-tuğ-u   aşçı   mutfak-ta   sürekli   zıpla-dı-lar.
       hire-NMLZ-POSS cook[NOM] kitchen-LOC non.stop jump-PST-PL
       'The cook they hired$_{sg}$ jumped$_{pl}$ in the kitchen non-stop.'

   c. Tut-tuk-lar-ı   aşçı   mutfak-ta   sürekli   zıpla-dı.
       hire-NMLZ-PL-POSS cook[NOM] kitchen-LOC non.stop jump-PST
       'The cook they hired$_{pl}$ jumped$_{sg}$ in the kitchen non-stop.'

   d. * Tut-tuk-lar-ı   aşçı   mutfak-ta   sürekli   zıpla-dı-lar.
       hire-NMLZ-PL-POSS cook[NOM] kitchen-LOC non.stop jump-PST-PL
       'The cook they hired$_{pl}$ jumped$_{pl}$ in the kitchen non-stop.'

All sentences were adapted by previous studies in Turkish agreement attraction (Lago et al., 2019; Türk and Logačev, 2024). Sentences started with a complex subject NP like 'tuttukları aşçı' 'the cook they hired,' in which the nominalized relative clause functioned as the attractor, and the head noun were bare. Because the plural marking on nominals is not optional and the head noun was singular, absent of -lar, in all conditions, sentences with plural verb agreement were ungrammatical. To inhibit participants from forming a task-related strategy in which they deemed the sentence ungrammatical upon seeing a plural verb, half of our fillers included plural grammatical verbs, while the other half included singular ungrammatical verbs.

2.3. Procedures

The experiment was run online, using the web-based platform Ibex Farm (Drummond, 2013). Each experimental session took approximately 25 minutes to complete. Participants provided demographic information and gave informed consent to participate in the experiment. They then proceeded to read the instructions and were given nine practice trials before the experiment began.

Each trial began with a blank screen for 600 ms, followed by a word-by-word RSVP presentation of the sentence in the center of the screen, followed by a prompt to indicate their acceptability judgment. Sentences were presented word-by-word in the center of the screen in 30 pt font size, at a rate of 400 ms per word. Participants saw a blank screen for 100 ms between each word, and to see the next item, they needed to press the space key. Participants were asked to press the key P to indicate that a sentence is acceptable and Q to indicate that the sentence is unacceptable. They were instructed to provide judgments as quickly as possible. During the practice, but not during the experiment, a warning message in red font appeared if they did not respond within 5,000 ms.

Participants saw 40 experimental and 40 filler sentences. Experimental sentences were distributed among four different lists according to a Latin-square design. Every participant saw one version of the experiment with a specific list and one item per condition.

2.4. Analysis and Results

Participants showed high accuracy in both grammatical (M = 0.94, CI = [0.92,0.95]) and ungrammatical filler sentences (M = 0.92, CI = [0.9,0.93]), indicating that they understood the task and performed it reliably.

Figure 1 presents the overall means and credible intervals for 'yes' responses across experimental conditions. As shown, ungrammatical sentences with plural attractors were rated as acceptable as their counterparts with singular attractors (M = 0.06 and 0.05, CI = [0.04, 0.07] and [0.03, 0.07] for singular and plural attractors, respectively).

On the other hand, accuracy in grammatical conditions was modulated by the number of the attractor in an unexpected way. Participants rated grammatical sentences with singular attractors as grammatical less often (M = 0.92, CI = [0.9,0.94]) compared to their counterpars with plural attractors (M = 0.95, CI = [0.93,0.96]).
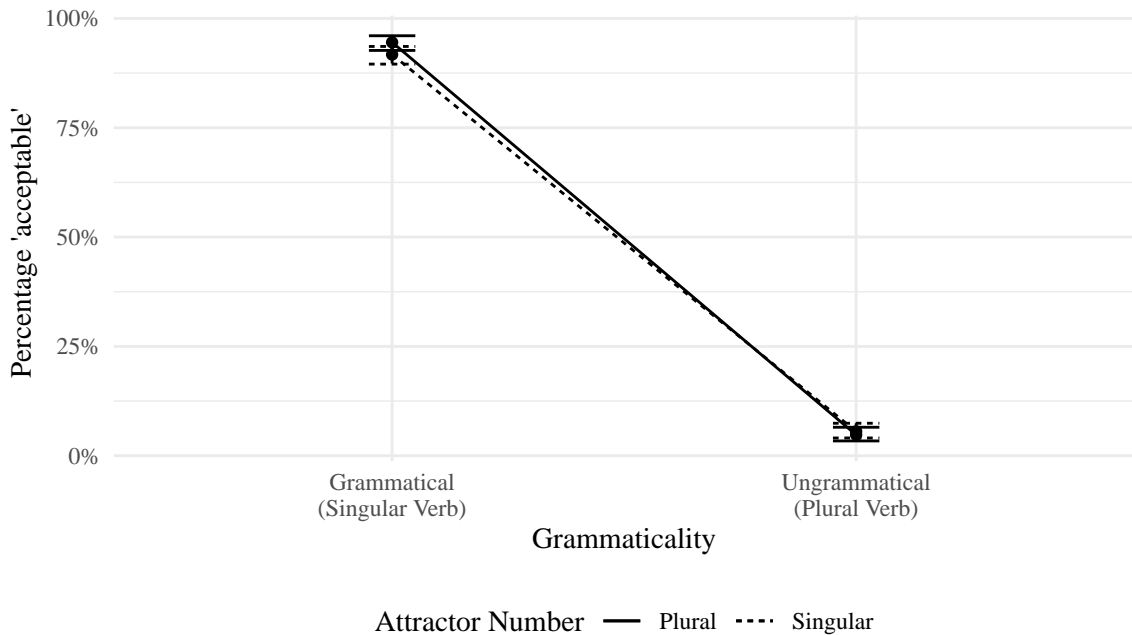

Figure 1: Mean proportion of 'acceptable' responses by grammaticality and attractor number. Error bars show 95% Clopper–Pearson confidence intervals.

These descriptive trends were confirmed by our Bayesian mixed-effects models implemented in brms, assuming a Bernoulli logit link. The model was fitted to the binary *yes/no* responses and included fixed effects for Grammaticality and Attractor Number and their interaction, and random intercepts and slopes for both subjects and items.

Posterior estimates are summarized in Figure 2. The model revealed a positive effect of grammaticality (β = 5.92 [5.41, 6.46], P(β > 1.00)), but no reliable main effect of attractor number (β = 0.15 [-0.19, 0.51], P(β > 0.81)). On the other hand, there was a small but positive interaction (β = 0.66 [-0.02, 1.38], P(β > 0.97)). To clarify the effects' presence in grammaticals only, we fitted two more models that is fitted to the subset of the data. While the model fitted to grammatical conditions only showed an effect of attractor number (β = 0.51 [0.06, 1.00], P(β > 0.99)), the model fitted to ungrammatical conditions did not provide evidence for the effect of number manipulation (β = -0.05 [-0.45, 0.37], P(β > 0.99)). These results suggest that the presence of a plural attractor did not increase the acceptability of ungrammatical sentences, nor was this relationship modulated by grammaticality.
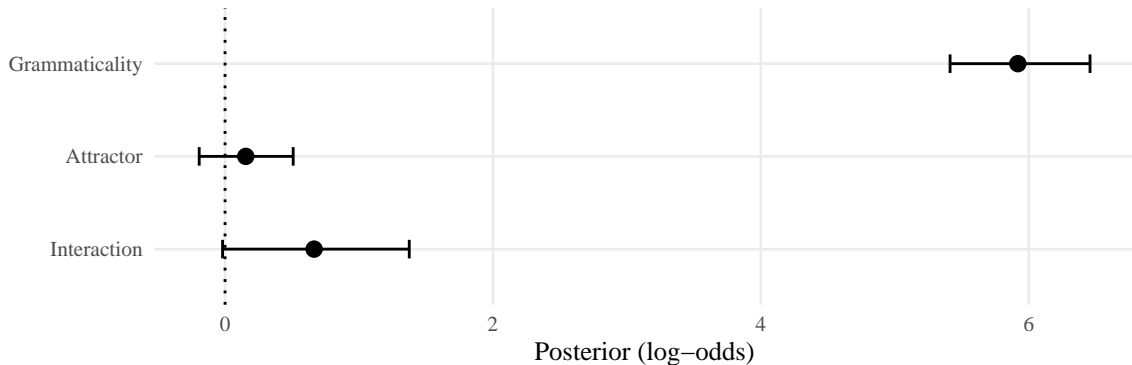
Figure 2: Posterior means and 95% credible intervals for fixed effects in the two Bayesian models. The x-axis shows the posterior mean (log-odds scale). The blue intervals correspond to the model in which a positive interaction was assumed, and the orange intervals to the model in which it was not.

2.5. Discussion

Experiment 1 tested whether phonological overlap between nominal and verbal plural morphemes in Turkish induces agreement attraction. The results provided no evidence for attraction driven by surface-form similarity. Ungrammatical sentences with plural-marked verbs were not judged more acceptable when the relative clause verb contained a plural morpheme. Instead, participants reliably rejected such sentences regardless of attractor number. This indicates that the verbal plural marker -lAr does not create the same type of interference observed with nominal plural attractors in previous studies.

Unexpectedly, grammatical sentences with singular attractors were judged less acceptable than those with plural attractors. This effect is unlikely to reflect agreement attraction, since it arises in the opposite direction. One possibility is that it results from an interaction between plausibility and referential availability. The plural morpheme can license a more general interpretation by allowing an arbitrary or unspecific reference, whereas the singular reduced relative clause more strongly invites a specific referent, which may be less accessible in the context of the task. In other words, plural morphology may facilitate an *arbitrary PRO* interpretation of the embedded clause, in which the understood subject of the relative clause is not controlled by any overt antecedent and has a generic or impersonal reference. A similar effect can be seen in English sentences like 'Just to sit there should be forbidden.' Here, the subject of the infinitival clause has arbitrary reference. We do not pursue this explanation further, as it falls outside the scope of the present paper.

One possible reason for the absence of attraction may lie in the within-experiment statistics. Previous work has shown that participants' global expectations about the frequency of grammatical and ungrammatical sentences can alter attraction patterns. Hammerly et al. (2019) and Türk (2022) demonstrated that reducing the proportion of grammatical trials led to attraction effects even in otherwise grammatical sentences. Similarly, Arehalli and Wittenberg (2021) reported that filler distribution affects error correction rates. It is possible that the current experiment's distribution discouraged attraction: if participants rarely encountered conditions that supported attraction, they may have maintained a strong bias against plural-marked verbs, reinforcing this bias throughout the session.

To test this possibility, Experiment 2 introduced additional conditions that have previously been shown to elicit attraction in Turkish (Türk and Logačev, 2024; Lago et al., 2019). This allowed us to assess whether the inclusion of genuine nominal attractors modulates the likelihood of errors and whether participants adapt to the statistical environment of the task.

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3. Experiment 2: Testing Within-Experiment Statistical Sensitivity

3.1. Participants

We recruited 95 undergraduate students to participate in the experiment in exchange for course credit. All participants were native Turkish speakers, with an average age of 21 (range: 18 – 30). The experiment was carried out following the principles of the Declaration of Helsinki and the regulations concerning research ethics at Bogazici University. All participants provided informed consent before their participation and their identities were completely anonymised.

3.2. Materials

The same materials were used with Exp1. We added items from Türk and Logačev (2024) as an additional condition for nominal cases.

3.3. Procedures

The same procedure with Experiment 1 was used.

3.4. Analysis and Results

Participants showed high accuracy in both grammatical (M = 0.95, CI = [0.94,0.96]) and ungrammatical filler sentences (M = 0.94, CI = [0.93,0.95]), indicating that they understood the task and performed it reliably.

Figure 3 presents the overall means and credible intervals for 'yes' responses across experimental conditions, as well as the previous data from Türk and Logačev (2024), which is quite similar to the magnitude of Lago et al. (2019). As shown, in our study, participant gave more 'yes' responses to ungrammatical sentences with plural genitive-marked nominal attractors (M = 0.12, CI = [0.09,0.15]) compared to their singular counterparts (M = 0.12, CI = [0.09,0.15]).

However, similar increase in acceptability was not found with relative clause attractors (M = 0.05 and 0.05, CI = [0.03, 0.07] and [0.03, 0.07] for singular and plural attractors, respectively). Participants rated grammatical sentences similarly independent of the attractor number or attractor type.
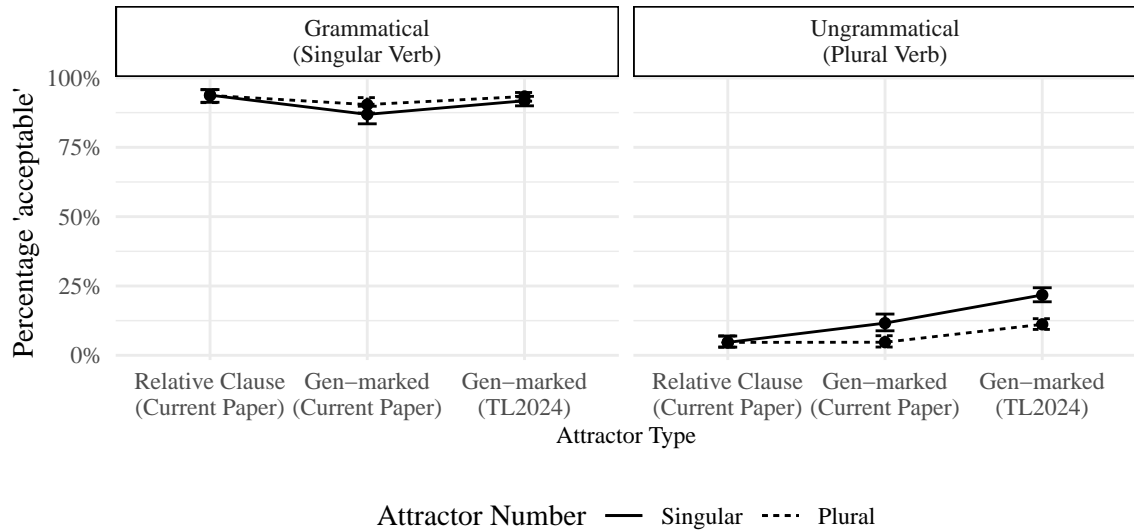

Figure 3: Mean proportion of 'acceptable' responses by grammaticality, attractor number and attractor type. Error bars show 95% Clopper–Pearson confidence intervals.

Our models also showed similar results, assuming a Bernoulli logit link. Our main research question was whether verbal attractors induced attraction effects. We also wanted to check whether within-experiment statistics affected the attraction magnitudes, i.e. the effect of presence of verbal attractors on nominal attractors. To that end, we included genitive marked nominals from data from our experiment and Türk and Logačev (2024). The model was fitted to the binary *yes/no* responses and included fixed effects for Grammaticality, Attractor Number, and Attractor Type and their interaction, along with random intercepts and slopes for both subjects and items.

We present posterior summaries of estimated regression effects from our model in Figure 4. We found a robust attraction in both nominal attractor cases, with strongly negative effects for our nominal items (M = -1.45, CI = [-2.12, -0.78], P(<0) = >0.99) and items from Türk and Logačev (2024) (M = -1.16, CI = [-1.63, -0.68], P(<0) = >0.99). More importantly, our model found no evidence for an attraction in verbal attractor conditions (M = 0.08, CI = [-0.7, 0.86], P(<0) = 0.44), verifying our observations in the descriptive statistics. The evidence for a difference in magnitude of attraction between the two genitive types was not found (M = -0.29, CI = [-1.08, 0.51], P(<0) = 0.72), suggesting the within-experimental distribution did not affect attraction magnitudes. Finally, we found strong evidence for a decreased overall acceptability for nominal items in our experiment (M = -1.1, CI = [-1.79, -0.44], P(<0) = >0.99), suggesting the within-experimental distribution did affect overall acceptability, but not attraction.
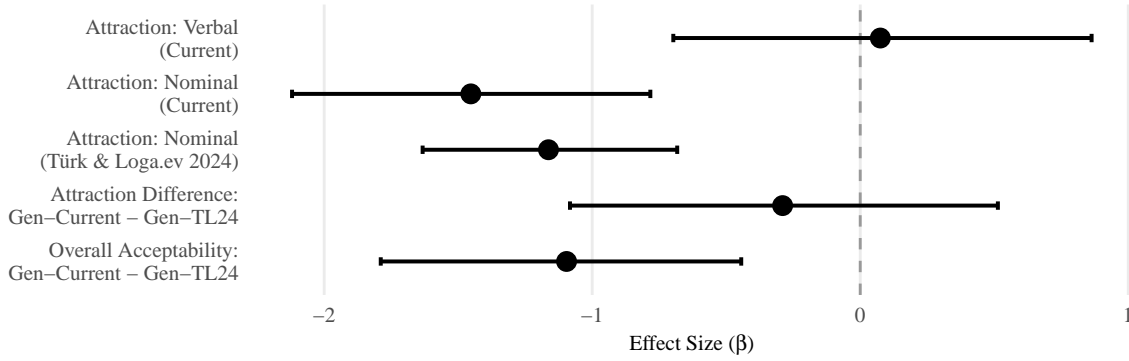

Figure 4: Posterior summaries of attraction-related effects. Points indicate posterior means, and horizontal bars show 95% credible intervals on the log-odds ( ) scale. Attraction was estimated as the interaction between grammaticality and attractor number within each attractor type. Negative values indicate stronger attraction (a reduced ungrammaticality penalty in plural-attractor conditions). Dashed line denotes zero (no effect).

3.5. Discussion

Experiment 2 tested whether the reason we did not find attraction effects in Experiment 1 was due to the lack of attraction-inducing conditions. Our results showed that attraction effects in verbal attractor condition, purely phonological overlap, did not surface even when there are robust attraction-inducing trials. Participants reliably rejected ungrammatical sentences with verbal attractors regardless of attractor number.

Our results and between experiment comparison showed that within-experiment statistics, i.e. exposure to verbal attraction conditions attraction items, did not substantially reduced the magnitude of the attraction effects. However, the overall acceptability in our nominal attractor elements were reduced compared to the trials from Türk and Logačev (2024). This is inline with previous findings that shows participants' judgments within the experiment are modulated by the distribution of trials. Interestingly, previous studies achieved this with instructions or filler elements (Hammerly et al., 2019; Arehalli and Wittenberg, 2021). We show that the experimental conditions and the presence of an effect within a subset of conditions also plays a role in modulating overall acceptability.

4. General Discussion

In two high-powered speeded acceptability judgment experiments, we tested whether pure phonological overlap between agreement morphemes can elicit agreement attraction. Our goal was to evaluate previous accounts that attribute attraction to accidental or non-accidental syncretism between forms that can serve as agreement controllers. Turkish provides a useful test case because the plural suffix -lAr appears both on verbs and on nouns, but only nominal -lAr can control agreement. If phonological overlap alone can activate controller-relevant cues, then plural-marked verbs embedded in reduced relative clauses should induce attraction effects even though they cannot syntactically control agreement.

Across both experiments, we found that Turkish attraction is determined by being a potential controller rather than merely resembling one. Participants did not produce or endorse attraction errors in sentences containing verbal attractors, and this absence of attraction persisted even when the same participants showed robust attraction with nominal attractors in the same session.

These results indicate that attraction depends on abstract feature overlap with potential controllers, not on surface-form similarity. This pattern converges with prior results in English and Turkish that failed to find attraction for pseudoplural or phonologically plural forms (Bock and Eberhard, 1993; Haskell and MacDonald, 2003; Nicol et al., 2016), and stands in contrast to findings from Russian (Slioussar, 2018).

In Slioussar (2018), genitive-marked singular nouns that were homophonous with nominative plurals elicited greater attraction effects than their genitive-plural counterparts. This is striking because the relevant nouns lacked a plural feature that could percolate or serve as a retrieval cue. The effect was therefore interpreted as evidence that comprehenders can use phonological form to activate abstract agreement features. However, it is important to note that the evidence for phonological attraction in Russian rests on a small empirical base. The production and comprehension experiments in (Slioussar, 2018) included only 32 participants each, and the attraction effects were derived from a small number of error trials (13 in production and 18 in comprehension). Given the low number of critical observations, such effects are vulnerable to sampling variability and may not generalize beyond that dataset.

The high-powered Turkish results challenge that interpretation. Despite identical surface overlap between verbal and nominal plural morphology, phonological similarity alone did not yield attraction. This cross-linguistic contrast suggests that form-based activation of agreement features is not a universal property of the parsing system but, at best, depends on language-specific mappings between morphology and syntactic function (Dillon and Keshev, 2024).

A more plausible account is that attraction is modulated by the availability of morphosyntactic features that can signal controllerhood. Syncretism contributes to attraction only when one of the syncretic forms can legitimately control agreement or share features with the target. In other words, it is not form overlap per se, but feature ambiguity that matters. This interpretation aligns with cross-linguistic findings showing that attraction is strongest when the attractor bears case or number morphology that is sometimes associated with subjects or agreement controllers (Lago et al., 2019; Bhatia and Dillon, 2022; Bleotu and Dillon, 2024; Hartsuiker et al., 2003). Earlier formulations of these models left open whether 'looking like' a controller or 'being able to be' a controller was critical. The present results favor the latter: only morphologically licensed controllers engage in attraction.

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