

Superiority Effects with Wh-Adjuncts in Turkish

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Plan for today

1. Primer on *wh*-superiority (Bošković 1997)
2. Primer on Turkish
3. So-called anti-superiority in Turkish
4. Turkish Adjunct Data: Not-so-different after all
5. Discussion, our questions, and ideas for an analysis

1 *wh*-Superiority

- Superiority effects describe the ban on crossing a lower element over a higher element

↳ ✗ [[xp]_j ... [[xp]_i ... t_j]]

↳ ✓ [[xp]_i ... [t_i ... [xp]_j]]

- This constraint surfaces in different shapes in typologically different languages.

Move-1-*wh*-phrase languages: Only the syntactically higher *wh*-phrase can move to left-periphery.

- (1) a. Harold climbed the mountain.
b. Who climbed what?
c. * What who climbed?

Move-all-wh-phrases languages: Strict ordering within *wh*-phrases in Serbo-Croatian.

- (2) a. Ko₁ si koga₂ turdio da je t₁ istukao t₂? (Bošković 1997, p. 5)
who are who claimed that is beaten
'Who did you claim beat whom?'
- b. *Koga₂ si ko₁ turdio da je t₁ istukao t₂? (Bošković 1997, p. 5)
who are who claimed that is beaten
Intended: 'Who did you claim beat whom?'

Move-no-wh-phrases languages: Lower *wh*-phrase cannot be interpreted at the matrix level alone.

- (3) Taro-wa dare-ga nani-o katta ka siritagatteru no? (Saito and Yoon 2004)
Taro-TOP who-NOM what-ACC bought Q want.to.know Q
✓ Polar: Does Taro want to know [for which x, y] x bought y.
✓ Pair-list: [For which x, y] Taro wants to know whether x bought y
✓ Superior-moved: [For which x] Taro wants to know [for which y] x bought y
✗ Lower-moved: [For which y] Taro wants to know [for which x] x bought y

• A common thread between (1c), (2b), and (3) is the immobility of a syntactically lower *wh*-phrase. Their movement is limited when there is another *wh*-phrase higher than them.

• Bošković (1997) captured these facts with the constraint called The Superiority Condition:

(4) *The Superiority Condition*

- a. No rule can involve X, Y in the structure
... X ... [... Z ... WYV ...] ...
where the rule applies ambiguously to Z and Y, and Z is superior to Y.
- b. the category A is 'superior' to category B if every major category dominating A dominates B as well but not conversely.

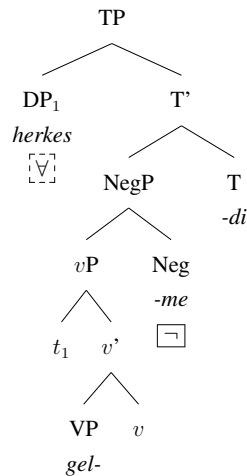
2 Turkish Basics

Turkish subject does not move to [Spec, TP].

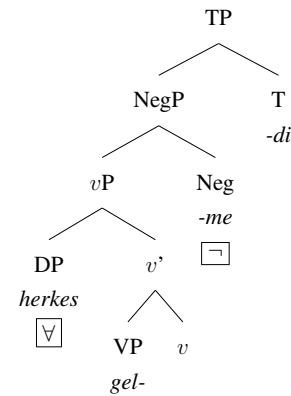
- Scopal relations give us the position of the subject. It does not leave its θ position.¹

- (5) Herkes gel-me-di.
 everyone come-NEG-PST
 a. ✗ ‘No one came.’
 b. ✓ ‘Some came.’

- (6) Unavailable $\forall\neg$ configuration



- (7) $\neg\forall$ configuration



Turkish scrambles pretty hard.

- Even though it seems wild, there is a set of constraints which limits this behavior, such as case marking.
- Adjuncts can also be scrambled. Adjuncts like *fortunately*_{CP} (*iyi ki*), *luckily*_{CP} (*allahtan*), *then*_{TP} (*sonra*), or *repeatedly*_{ASP} (*bir daha bir daha*) can be inserted between any elements (8).

- (8) a. Füsün küpe-yi bul-du.
 Füsün earring-ACC find-PST
 ‘Füsün found the earring.’
 b. Küpeyi₁ Füsün t₁ buldu.
 c. Füsün t₁ buldu küpeyi₁.
 d. t₁ Küpeyi buldu Füsün₁.
 e. t₁ t₂ buldu Füsün₁ küpeyi₂.
 f. t₁ t₂ buldu küpeyi₂ Füsün₁.

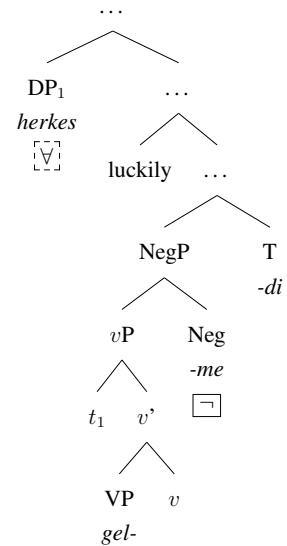
¹Assuming T>NEG, as NEG can occur nominalized VPs that lack Tense or Aspect specifications.

Movement out of θ -position is available.

- Scrambling to the left of a high adverbial necessitates a wide scope. *But, where does \forall land?*

- (9) Herkes₁ Allahtan t₁ gel-me-di.
 everyone luckily come-NEG-PST
 a. ✓ ‘Luckily, no one came.’
 b. ✗ ‘Luckily, some came.’
- (10) Herkes₁ iyi ki t₁ gel-me-di.
 everyone fortunately come-NEG-PST
 a. ✓ ‘Fortunately, no one came.’
 b. ✗ ‘Fortunately, some came.’
- (11) Herkes₁ sonrasında t₁ gel-me-di.
 everyone then come-NEG-PST
 a. ✓ ‘No one came later.’
 b. ✗ ‘Some came later.’
- (12) Herkes₁ bir daha bir daha t₁ gel-me-di.
 everyone repeatedly come-NEG-PST
 a. ✗ ‘No one came repeatedly.’
 b. ✓ ‘Some came repeatedly.’

(13) $\forall\bar{\neg}$ configuration



Both A and \bar{A} Scrambling (Öztürk 2005).

- Common test: Reconstruction (Saito and Fukui 1998).
 ↳ A-movement is for interpretation, thus cannot be withdrawn.
 ↳ \bar{A} -movement is vacuous, thus can give rise to reconstruction.

- (14) a. Herkes_i [pro_i sekreter-in-i] ara-mış.
 everyone secretary-POSS-ACC call-PST.EVID.3SG
 ‘Everyone_i called her_i secretary.’
 b. * [pro_i sekreter-in-i]_j herkes_i t_j ara-mış

- Immediate preverbal position is inherently focused in Turkish.
- When we defocus *secretary*, reconstruction is available.

- (15) a. Herkes_i [pro_i sekreter-in-i] bugün ara-mış.
 everyone secretary-POSS-ACC today call-PST.EVID.3SG
 ‘Everyone_i called her_i secretary today.’
 b. [pro_i sekreter-in-i]_j herkes_i t_j bugün aramış

Turkish *wh*-phrases can be scrambled, too.

- Turkish is canonically a *wh*-in-situ language
- A *wh*-can be focus moved out of its in-situ position

- (16) a. Peter kim-i okul-da gör-dü?
P[NOM] who-ACC school-LOC see-PST.3SG
'Peter saw who at school.'
- b. Peter okul-da kim-i gör-dü?
P[NOM] school-LOC who-ACC see-PST.3SG
'Peter saw who at school.'
- c. Kim-i Peter okul-da gör-dü?
who-ACC P[NOM] school-LOC see-PST.3SG
'Peter saw who at school.'

- We know that
 - (a) Superiority: languages across different *wh*-types obey the superiority constraint
 - (b) that Turkish can both A and \bar{A} scramble,
- **A natural question:** What is the nature of the interaction between the Superiority constraint and the Scrambling ability?
- Turkish does not constrain the ordering of multiple *wh*-elements in a single clause (Göksel and Kerslake 2005).
- *wh*-phrases that originate in different clauses give rise to superiority-like constraints in their ordering (Özsoy 2009).

3 Anti-Superiority

No ordering between multiple *wh*-phrases.

- Turkish allows violation of the superiority constraint as shown in (17a)
- Sentences (17a) and (17b) are equally possible, with (17b) violating the superiority conditions.

- (17) a. Kim kim-i gör-dü?
Who[NOM] who-ACC see-PST.3SG
'Who saw whom?'
✓ Pair-list answer — ✗ Object answer — ✗ Subject answer
- b. Kim-_i kim _{t_i} gör-dü?
Who-ACC who-[NOM] see-PST.3SG
'Whom saw who?'
✓ Pair-list answer — ✗ Object answer — ✗ Subject answer

Long covert scrambling of lower *wh* is possible.

- In addition to local scrambling, Turkish also allows long-scrambling of *wh*-elements.
- (18) is the same as the Japanese example in (3).

↳ The lower element cannot be interpreted high in Japanese due to superiority.

↳ Turkish allows syntactically lower *wh*-phrase to be interpreted high.²

- (18) Sen [_{CP} kim-in kim-i gör-düğü] sor-du-n?
you[NOM] who-GEN who-ACC see-NMLZ-POSS-ACC ask-PST-2SG
'Who did you ask who saw *t*?'
✓ Pair-list answer — ✓ Object answer — ✓ Subject answer — ✓ Declarative reading

²You may ask whether *wh*-phrases in Turkish ever move, it is an ongoing debate, but it is an orthogonal issue anyway: whatever the movement is it can target lower *wh*-phrase.

- In addition to covert one, overt scrambling is also available.
- When overtly moved, the *wh*-phrase that stayed behind cannot be interpreted high.

- (19) a. Kim- i_1 sen [_{CP} kim-in t_1 gör-düğü] sor-du-n?
 who-ACC you[NOM] who-GEN see-NMLZ-POSS-ACC ask-PST-2SG
 ‘Who did you ask who saw t ?’
 ✓ Pair-list answer — ✓ Object answer — ✗ Subject answer — ✗ Declarative reading
- b. Kim-in $_1$ sen [_{CP} t_1 kim-i gör-düğü] sor-du-n?
 who-GEN you[NOM] who-ACC see-NMLZ-POSS-ACC hear-PST-2SG
 ‘Who did you ask t saw who?’
 ✓ Pair-list answer — ✗ Object answer — ✓ Subject answer — ✗ Declarative reading

Superiority-like behavior arises only with *wh*-phrases from different clauses (Özsoy 2009)

- Similar to cases of overt scrambling, the interpretation of the lower *wh*-phrase is restricted within the embedded clause.

- (20) Aylin kim-e [_{CP} Zeynep-in kim-i gör-düğ-ün-ü] sor-du?
 A[NOM] who-DAT Z-GEN who-ACC see-NMLZ-POSS-ACC ask-PST
 ‘Whom did Aylin ask t Zeynep saw who?’
 ✓ Pair-list answer — ✗ Object answer — ✓ Indirect Object answer

- Even though long-scrambling of a syntactically lower *wh*-phrase is possible, it is prohibited when they originate in different clauses (Özsoy 2009).

- Lower *wh* is not only interpreted within the embedded clause, it has to stay in the embedded clause.

- (21) a. Kim- e_i Aylin t_i [_{CP} Zeynep-in kim-i gör-düğ-ün-ü] sor-du?
 who-DAT A[NOM] Z-GEN who-ACC see-NMLZ-POSS-ACC ask-PST
 ‘Whom did Aylin ask t Zeynep saw who?’
 ✓ Pair-list answer — ✗ Object answer — ✓ Indirect Object answer.
- b. * Kim- i_i Aylin kim-e [_{CP} Zeynep-in t_i gör-düğ-ün-ü] sor-du?
 who-ACC A[NOM] who-DAT Z-GEN see-NMLZ-POSS-ACC ask-PST
 ‘Who did Aylin ask Zeynep saw t ?’

4 Local Superiority in Turkish

- It initially seems like superiority only surface between non-local *wh*-phrases.
- We show that the superiority relation between local *wh*-elements exists, contra Özsoy (2009).
- These effects only occur with an adjunct *wh*-phrase. It is not surprising to see argument-adjunct asymmetry (see Çağrı 2005 and İnce 2009 for the same asymmetry in sluicing and islands).
- Superiority constraints, that we show exist, can be ameliorated with defocus.

- Turkish allows multiple *wh*-phrases that differ in their argumenthood. The scrambling is also available.

- (22) Kim nereye git-ti?
 who[NOM] where go-PST.3SG
 ‘Who went where?’
- (23) Nereye kim t_1 git-ti?
 where who[NOM] go-PST.3SG
 ‘Who went where?’

- Unlike previous Turkish examples, adjuncts (24) behave similar to the Japanese data.

↳ The syntactically lower *wh*-phrase is blocked from taking high scope.

- (24) Sen [_{CP} kim-in nereye git-tiğ-in-i] sor-du-n.
 you who-GEN where go-NMLZ-POSS-ACC ask-PST-2SG.
 ‘You asked who went where.’
 ✓ Pair-list answer — ✓ Subject answer — ✗ Adjunct answer — ✓ Declarative reading

- This blocking is not characteristic to *where*, it only surfaces in the presence of another *wh*.

- (25) Sen [_{CP} on-un nereye git-tiğ-in-i] sor-du-n.
 you he-GEN where go-NMLZ-POSS-ACC ask-PST-2SG.
 ‘You asked he went where.’
 ✓ Adjunct answer — ✓ Declarative reading

Another counter-evidence to the claim that superiority effects only arise when the *wh*-elements are in separate clauses come from their interaction with other adjuncts.

- In sentences with additional adverbs, presence of two *wh*-phrases that differ in their argumenthood is subject to superiority effects.

(26) Dün kim nereye git-ti?
yesterday who[NOM] where go-PST.3SG
'Who went where yesterday?'

- Scrambling between *wh*-phrases is allowed.

(27) Dün nereye₁ kim t₁ git-ti?
yesterday where who[NOM] go-PST.3SG
'Who went where yesterday?'

- Scrambling the argument even further is also allowed.

(28) Kim₁ dün t₁ nereye git-ti?
who[NOM] yesterday where go-PST.3SG
'Who went where yesterday?'

- However, we see that adjuncts are not entitled to the same level of mobility.

(29) *Nereye₁ dün kim t₁ git-ti?
where yesterday who[NOM] go-PST.3SG
Intended: 'Who went where yesterday?'

- These effects are not limited to these specific examples. They are also not related to the Adv-hierarchy.

↳ In (29), location cannot scope over time-related adverbial.

↳ In (30), it is the other way around.

(30) *Ne zaman okul-da kim film izledi?
what time school-LOC who[NOM] movie[ACC] watch-PST.3SG
Intended: 'Who watched a movie at school?'

Local superiority is ameliorated with F-marking.

- Similar to reconstruction effects, when we add an overt F-marking to either the argument *wh*-phrase or another element, superiority constraints are lifted.
- Is the difference A and \bar{A} -scrambling?

- (31) a. Nereye₁ dün kim_F t₁ gel-di?
Where yesterday who[NOM] come-PST.3SG
'Where did WHO_F come yesterday?'
- b. Nereye₂ kim_{1,F} dün t₁ t₂ gel-di?
where who[NOM] yesterday come-PST.3SG
'Where did WHO_F come yesterday?'
- c. Nereye₂ kim₁ dün_F t₁ t₂ gel-di?
where who[NOM] yesterday come-PST.3SG
'Where did WHO_F come yesterday?'
- d. *Nereye_{F,1} dün kim t₁ gel-di?
Where yesterday who[NOM] come-PST.3SG
'Where_F did Where come yesterday?'

5 The Puzzle

- The puzzle that emerges from this data is twofold:
 - ↳ What causes the presence of the superiority effects when they occur?
 - ↳ Is it the case that adjuncts like *yesterday* create/ or reinstate superiority?
- What is the power of F-marking such that it ameliorates the superiority constraint and allows otherwise illicit leftward movement?

TAKING STOCK

- The superiority constraint is known to not apply to Turkish.
- We show that with multiple adjuncts, the superiority constraint does apply.
- However, this illicit *wh*-movement is allowed with F-marking other elements.

6 Possible Analysis and Discussion

- Adjuncts are known to have a weird syntactic effect in Turkish
 - ↳ Island effects are only visible with adjuncts (İnce 2009).
 - ↳ Adjuncts clauses cannot be clefted (Çağrı 2005; İnce 2012).
 - ↳ Sluiced adjunct clauses cannot follow clefts, but other clauses can (İnce 2012).
- The movement of arguments in Turkish is less constrained than that of adjuncts.
- Our observations align with this previous asymmetry.

We know:

- F-marking another element has a downstream structural consequence for other movements, i.e. changing landing location of other movements.
- The effects of F-marking in this domain (i.e. binding, islands) are already established (Öztürk 2005).

However, it's a surprise that:

- This effect extends to superiority effects, that are seemingly about relative locations of *wh*-phrases.

THE NEXT QUESTIONS

- ↳ What is the limit of F-marking, such that what other F-marked elements will lift the local superiority constraint?
- ↳ Will F-marking any element in the immediately preverbal position lift the constraint?
- ↳ Will F-marking elements in any other position lift the constraint?

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