

# Nanosyntactic Analysis of Turkish Case System\*

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## Overview

- Some Turkish cases may be omitted in specific environments for semantic effects.

### (1) Accusative Case

- a. Dün kitap oku-du-m.  
yesterday book read-PST-1SG  
'I read a book yesterday.'
- b. Dün kitab-**i** oku-du-m.  
yesterday book-**ACC** read-PST-1SG  
'I read the book yesterday.'

### (2) Genitive Case

- a. Ev-e adam gel-diğ-in-i bil-iyor-um.  
home-DAT man come-NMLZ-POSS-ACC know-PROG-1SG  
'I know that a man came to the home.'
- b. Ev-e adam-**ın** gel-diğ-in-i bil-iyor-um.  
home-DAT man-**GEN** come-NMLZ-POSS-ACC know-PROG-1SG  
'I know that the man came to the home.'

- It seems like ACC and GEN conveys specificity instead of definiteness, along with other semantic information.

### Puzzle #1

- Interestingly, all of these characteristics are limited to the ACC and GEN cases.
  - When other cases are omitted, sentences become ungrammatical regardless of the DPs function as an argument or adjunct.

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Abbreviations: 1 = first person, 3 = third person, ABL = ablative, ACC = accusative, AOR = aorist, CAUS = causative, DAT = dative, GEN = genitive, LOC = locative, NMLZ = nominalizer, NOM = nominative, PL = plural, POSS = possessive, PROG = progressive, PST = past, SG = singular, SPEC = specific.

- (3) Ben bu ev\*(-de) karar kıl-dı-m.  
 1SG this house-LOC decision render-PST-1SG  
 'I have decided on this house.'

— However, both specific and non-specific readings are still possible with overt cases.

- (4) Çocuk-ken ben-i palyaço-\*(-dan) çok kork-ut-tu-lar.  
 kid-when 1SG-ACC clown-ABL a.lot fear-CAUS-PST-3PL  
 'When I was a kid, they made me fear clowns a lot.'

### Puzzle #2

- Caha (2009) states that cases stand in a containment relation.
- The nominative is contained in the accusative (K1+K2), which is in turn contained in the genitive (K1+K2+K3). The whole sequence proposed by Caha (2009) is in (5).

(5) [<sub>COM</sub> K6 [<sub>INS</sub> K5 [<sub>DAT</sub> K4 [<sub>GEN</sub> K3 [<sub>ACC</sub> K2 [<sub>NOM</sub> K1 [NP]]]]]]]]

- In Turkish, this containment relation only holds for the ACC and GEN cases unlike other languages like Estonian, Tocharian, or Vlach Romani.

CASE	church, SG, EST	horse, SG, TOCH	boy, SG, ROM	man, SG, TR
NOM	kirik	yakw-i	čhav-ó	adam
ACC	kirik- <b>u</b>	yakw- <b>em</b>	čhav- <b>és</b>	adam- <b>ı</b>
GEN	kirik- <b>u</b>	yakw- <b>em</b> -ts	čhav- <b>és</b> -k(or)o	adam- <b>ı</b> -n
DAT (ALL)	kirik- <b>u</b> -le	yakw- <b>em</b> -ts	čhav- <b>és</b> -ke	adam -a
INS (COM)	kirik- <b>u</b> -l	yakw- <b>em</b> -mpa	čhav- <b>és</b> -ar	adam -la

### Our questions:

- Why do only ACC and GEN show this alternation?
- Why does containment only hold for ACC and GEN?
- Is there a relation between these questions?

# 1 A very brief background on ACC

- Diesing (1990) relates the accusative case to presupposition of existence.

(6) Ahmet kendin-e (bir) eş\*-i ar-ıyor.  
Ahmet himself-DAT (a) spouse\*-ACC look.for-PROG  
'Ahmet is looking for a spouse for himself'

- Enç (1991), using covert partitive constructions, argued that accusative links nominals to prior discourse, making them specific.

(7) a. Oda-m-a birkaç çocuk gir-di.  
room-POSS.1SG-DAT several kid enter-PST  
'Several children entered my room.'

b. İki kız-ı tan-ıyor-du-m.  
two girl-ACC know-PROG-PST-1SG  
'I knew two girls.'

c. İki kız tan-ıyor-du-m.  
two girl know-PROG-PST-1SG  
'I knew two girls.'

- Based on the non-referentiality of the book in (8), Öztürk (2005) argues that the semantic features like specificity is spelled-out with the ACC case.

(8) Dün kitap oku-du-m. \* Reng-i kırmızı-ydı.  
yesterday book read-PST-1SG color-POSS red-PST.  
Intended: 'I did book-reading yesterday, and its [book's] color was red.'

- Von Heusinger and Kornfilt (2005) showed that the ACC case does not always indicate specificity.

↪ ACC marking may be possible with non-specific readings when there is a generic operator.

(9) Ev-de çay-ı hep Aytül yap-ar.  
house-LOC tea-ACC always Aytül do-AOR  
'Aytül always makes the tea in our house.'

## 2 Our proposal in a nutshell

- Instead of looking at the issue as *omission of cases*, we propose that these are just different paradigms.

	Paradigm <sub>∅</sub>	Paradigm <sub>overt</sub>
NOM	∅	∅
ACC	∅	-i
GEN	∅	-in
DAT	-a	-a

- The question is then how do we decide which paradigm to use?
  - Semantic features like SPEC(ific) which are embedded into the nouns themselves will trigger one of the paradigms.
- **Main Idea:** The feature SPEC in the skeleton of the noun will interact with the spell-out of the upcoming features within cases. Lack of SPEC will block NOM and CONCEPT to be spelled out together as they do in specific forms.

	SURFACE FORM	CONCEPT	SPEC	NOM (K1)	ACC (K2)	GEN (K3)	DAT (K4)
NON-SPEC	adam (NOM)	[adam]		∅			
	adam (ACC)	[adam]			∅		
	adam (GEN)	[adam]				∅	
	adama (DAT)	[adam]					-a
SPEC	adam (NOM)	[adam]	[adam]				
	adamı (ACC)	[adam]	[adam]		-ı		
	adamin (GEN)	[adam]	[adam]		-ı	-n	
	adama (DAT)	[adam]	[adam]				-a

### What it entails:

- ~> Nouns and cases are decomposable into **submorphemic features**.
- ~> What will be spell-out by the bare noun and the size of the noun will vary according to the semantic features.
- ~> There are two possible ways to spell-out for ACC and GEN, meaning more than one lexical item.
- ~> Spell-out will be based on phrasal levels following Starke (2018).
- ~> Unlike Öztürk (2005), these case endings do not spell-out the semantic features.
- ~> Instead, they are conditioned by these semantic features.

### 3 Fleshed-out Analysis

- We are assuming the Spellout algorithm as given in Starke (2018), see (10) and (11).

(10) Spellout Algorithm (Starke, 2018)

- Merge F and spell out.
- If (a) fails, try spec-to-spec movement of the node inserted at the previous cycle, and spell out.
- If (b) fails, move the complement of F, and spell out.

(11) *Backtracking*

When spellout fails, go back to the previous cycle, and try the next option for that cycle.

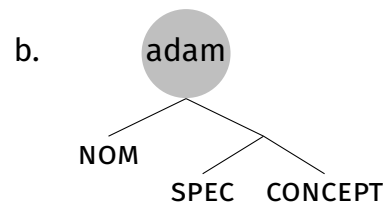
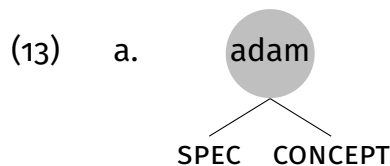
- We will start by giving out the proposed lexical items explicitly.

(12) adam ⇔ [NOM (K1) [SPEC [CONCEPT]]]  
 -i ⇔ [ACC (K2)]  
 -n ⇔ [GEN (K3)]  
 -∅ ⇔ [GEN (K3) [ACC (K2) [NOM (K1)]]]  
 -a ⇔ [DAT (K4) [GEN (K3) [ACC (K2) [NOM (K1)]]]]

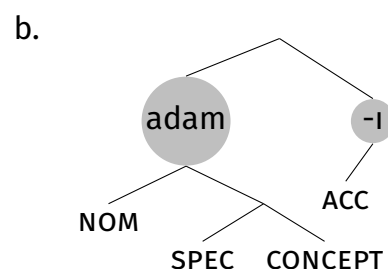
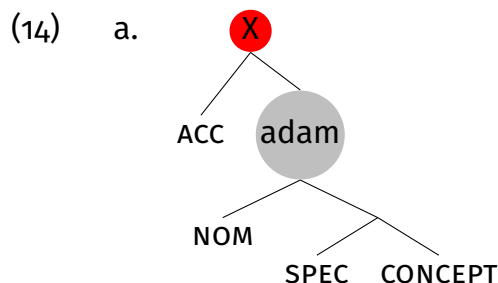
- The main point:** the two paradigms arise as a result of the interaction between the lexical entries in (12) and the spellout algorithm in (10) and (11).

- Let's first discuss the specific cases.

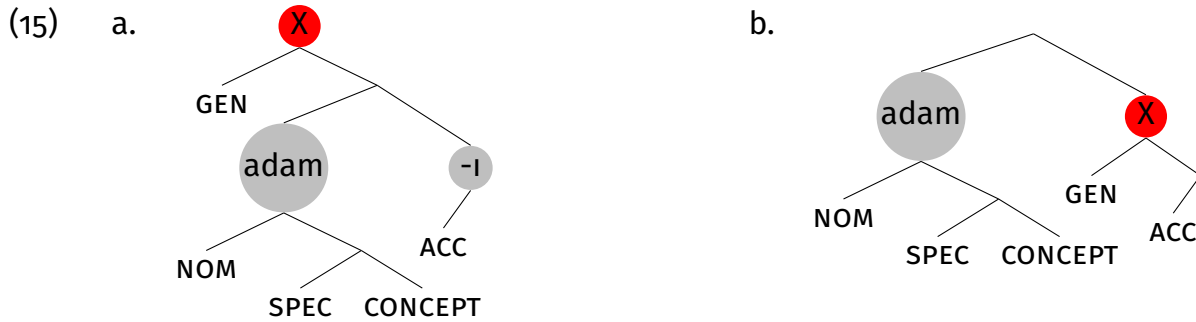
— *Adam* is lexically specified for NOM and SPEC and will spell out these features, see (13). The structures are assembled cyclically, first (13-a), then (13-b).



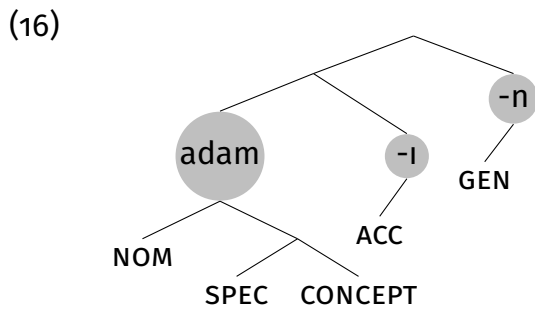
- What happens when we add the accusative feature ACC? Since bare nouns cannot be used as specific direct objects, we say that the root cannot spell out ACC (spell-out by the root fails in (14-a)). A roll-up movement therefore takes place (recall (10)) and ACC is spelled out in its own phrase.



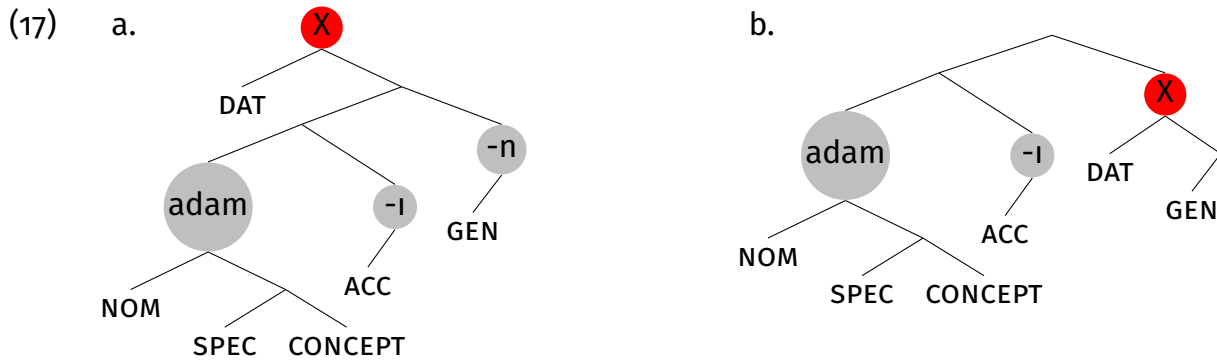
- When GEN is merged, direct spellout fails (15-a). Following (10), we first try to do cyclic movement and try to spell it out, but it fails again (15-b).



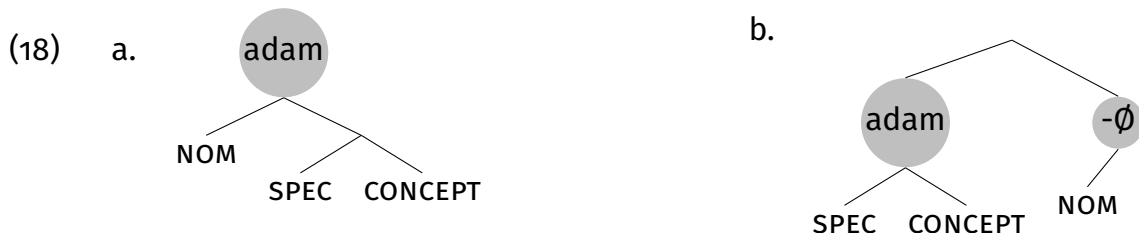
- Therefore, we try complement movement, yielding (16) (after moving the complement of GEN in (15-a)).



- When DAT is merged (17-a), direct spellout fails. We try cyclic movement (17-b), fail. Roll-up movement (not shown) fails too.

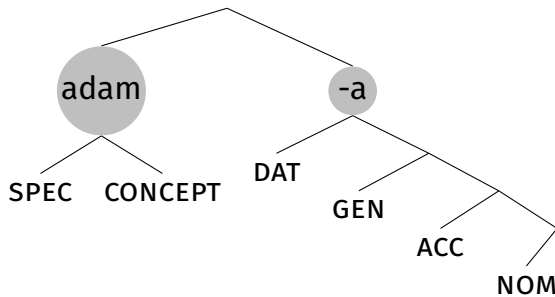


- This activates backtracking (11). We go back to the spell-out of NOM and instead of spelling it out within the root (18-a), we spell it out using roll-up movement and the “non-specific” ending.



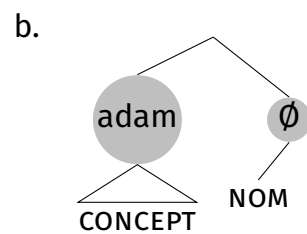
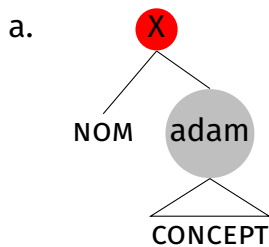
- Through several merges and cyclic movements, we will be able to spell the DAT structure out as follows.

(19)



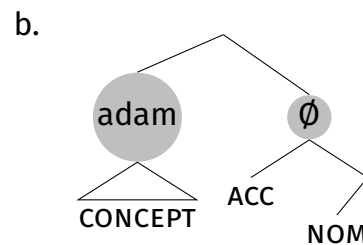
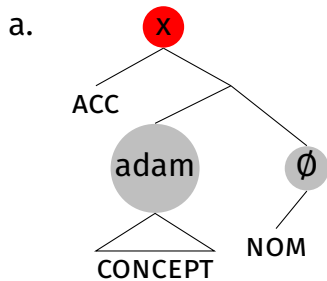
- Now, let's consider non-specific cases.
- [NOM (K1) [CONCEPT ]] will not be able to lexicalized by *adam* only. Since it is not a subset of [NOM (K1) [ SPEC [CONCEPT ]]] (see (20-a)).
- Therefore, we need complement movement (20-b). This movement was not done in specific cases because we were able to spell it out without movement.

(20)



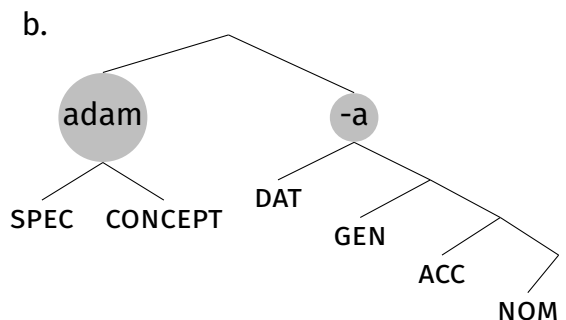
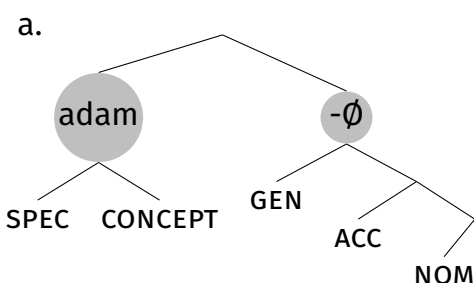
- When ACC is merged, we will not be able to spell it out again, so we again will cyclically move CONCEPT out.

(21)



- We keep doing cyclic movements, ultimately producing (22-a,b).

(22)



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