Typology of Nominalizations Formed with {-DIK}, {-mA}, {-(y)I§}, and {-Im} in Turkish

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1 Introduction

In Turkish, nominalization is a common strategy for subordination. These nominalized clauses generally have Genitive case-marked subjects with Possessive agreement-bearing predicates, as in (1).

(1) Ben [Ali-\text{nîn} git-tîğ-in]-i duy-du-m.
I-NOM Ali-GEN leave-DIK-POSS.3.SG-ACC hear-PST-1.SG
‘I heard that Ali left.’

Kornfilt (2001) describes these forms as degreed nominalizations with various functional verbal layers embedded under one or more nominal layers. In her description, some of the verbal layers are missing and are replaced instead by nominal ones. Accordingly, it could be hypothesized that the number of functional verbal layers present could change depending on the size of the clause that each nominalizer forms. This paper aims to investigate the clause sizes of the nominalizations formed by the nominalizers {-DIK}, {-mA}, {-(y)I§}, and {-Im}.

In section 2, we will test their DP status by looking at:

i) Which argument positions they can appear in,

ii) Whether they can function as adjuncts, and

iii) Whether they play a role in dependent case assignment.

Firstly, a regular DP can appear in any argument position as long as the c-selection and s-selection restrictions of the predicate are met; thus, it is expected that these nominalizations can appear in at least most of the available argument positions.
Secondly, given that functioning as an adjunct requires more of a verbal nature than a nominal one (Baker, 2011), they are not expected to function as an adjunct. However, we will see that when they receive lexical case, Turkish nominalized clauses can function as adjuncts. Lastly, a DP would play a role in dependent case assignment and so a nominalized clause should be able to do so if it is a DP in the outer-most layer.

In section 3, to test the clause size of each nominalization we will make use of Cinque’s (1999) analysis of adverbs targeting specific functional layers. We will assume this cartographic system, shown in (2), as an inventory of the functional layers that can(not) be present in a clause. Accordingly, adverb(s) that a clause can(not) take will be used as a diagnosis to show which functional layers are present.

(2)  [frankly Mood\_speech act [fortunately Mood\_evaluative [allegedly Mood\_evidential
probably Mod\_epistemic [once T\_past) [then T\_future) [perhaps Mood\_irrealis
necessarily Mod\_necessity /[possibly Mod\_possibility [usually Asp\_habitual
again Asp\_repetitive(I) [often Asp\_frequentative(I) [intentionally Mod\_volitional
quickly Asp\_celerative(I) [already T\_anterior) [no longer Asp\_terminative
still Asp\_continuative [always Asp\_perfect(?)] [just Asp\_retrospective [soon Asp\_proximative
briefly Asp\_durative [characteristically(?) Asp\_generic/progressive [almost Asp\_prospective
completely Asp\_SigCompletive(I) [tutto Asp\_PICompletive [well Voice [fast/early Asp\_celerative(II)
again Asp\_repetitive(II) [often Asp\_frequentative(II) [completely Asp\_SigCompletive(II) \ldots V

In section 4, we summarize the analysis and conclude.

2  DP Status of the Nominalized Clauses

The syntactic positions to be tested are:

i. Subject of a transitive verb,

ii. Direct object of a transitive verb,

iii. Object of a postposition, and

iv. Subject of an unaccusative verb.
In addition to the above, we will see whether our nominalizations can be adjuncts as well, and whether they trigger dative case on the second DP and receive accusative case when the matrix predicate is in causative voice.

2.1 As the Subject of a Transitive Verb

As can be seen in (3), all of these subordinations can appear in the subject position when the predicate is a transitive verb such as *etkile-‘to affect’.*

(3)  
a. [Ev-in yik-im-i]-Ø herkes-i etkile-di-Ø  
house-GEN destroy-Im-POSS.3.SG-NOM everyone-ACC affect-PST-3.SG  
‘The destruction of the house affected everyone.’

b. [Ali-nin gid-iş-i]-Ø herkes-i etkile-di-Ø  
‘Ali’s leaving affected everyone.’

c. [Ali-nin git-me-si]-Ø herkes-i etkile-di-Ø  
‘That Ali left affected everyone.’

d. [Ali-nin git-tiğ-i] *(gerçeğ-i)*-[Ø] herkes-i etkile-di  
Ali-GEN leave-DIK-POSS.3.SG fact-CM-NOM everyone-ACC affect-PST  
‘The fact that Ali left affected everyone.’

2.2 As the Direct Object of a Transitive Verb

As shown in (4), these subordinations can appear in the direct object position of a transitive verb.

(4)  
a. Herkes-Ø [ev-in yik-im-im]-i izle-di-Ø  
Everyone-NOM house-GEN destroy-Im-POSS.3.SG-ACC watch-PST.3.SG  
‘Everyone watched the destruction of the house.’

b. Herkes-Ø [Ali-nin gid-iş-in]-i kutla-di-Ø  
‘Everyone celebrated Ali’s leaving.’

1 {-DIK} nominalizations require an overt noun like *gerçeği* ‘fact that’ unless the matrix
2.3 As the Object of a Postposition

As a postposition, it seems *sonra* ‘after’ can take all of these nominalized clauses as the complement, as in (5). Differently than the rest, *{-DIK}* clauses do not take Genitive- but rather Nominative-marked subjects, and there is no Possessive agreement on the embedded verb. This structural difference requires additional study but is irrelevant for our purposes. For the focus of this study, that they can appear in this position is enough.

   house-GEN destroy-Im-POSS.3.SG-ABL after building-DAT start-PST-3.PL
   ‘They started (to build) the building after the destruction of the house.’

   b. [Ali-nin gid-iş-in]-den sonra biri taşın-di-Ø
   ‘After Ali’s leaving someone moved in.’

   c. [Ali-nin git-me-sin]-den sonra her şey değiştir-ti-Ø
   ‘After Ali left, everything (has) changed.’

   d. [Ali-(*nin) git-tik-(*in)]-ten sonra her şey değiştir-ti-Ø
   ‘After Ali left, everything (has) changed.’

2.4 As the Subject of an Unaccusative Verb

As an unaccusative verb, *kesinles*- ‘to become certain’ can take any of these nominalized clauses as its internal argument in the subject position, as in (6).

   house-GEN destroy-Im-POSS.3.SG Ali-GEN leave-Iş-POSS.3.SG
   ‘The destruction of the house…’ ‘Ali’s leaving…’
2.5 As an Adjunct

In Turkish, another type of subordinate clause, ‘diye’ clauses, can function as a clausal argument, as in (7a), and be substituted by a nominalization, as in (7b).

(7)  

‘Ayşe was upset because Ali left.’

‘Ayşe was upset because Ali left.’

They can also function as reason-denoting adjunct clauses, shown in (8a), in which case substituting the clausal adjunct with a nominalization yields ungrammaticality when the nominalization receives structural case, as in (8b). However, an adjunct nominalization is grammatical when the case it receives is lexical, given in (8c). Also, (8d) shows that a postpositional phrase formed with için ‘since’ is perfectly fine.

(8)  

a. Ali-Ø Ayşe-yi [pro_i çalışkan diye] sev-iyor-Ø  
Ali-NOM Ayşe-ACC hardworking COMP like-IMPERF-3.SG  
‘Ali likes Ayşe because she is hardworking.’

b. *Ali-Ø Ayşe-yi [pro_i çalışkan ol-duğ-un-u]  
Ali-NOM Ayşe-ACC hardworking be-DIK-POSS.3.SG-ACC  
sev-iyor-Ø  
like-IMPERF-3.SG
Intended: ‘Ali likes Ayşe because she is hardworking.’

c. Ali-Ø [Ayşe-nin git-me-sin]-e / git-tiğ-in-de  
şair-di-Ø
be.surprised-PST-3.SG
‘Ali was surprised that/when Ayşe left.’

d. Ali-Ø Ayşe-yi [pro. çalışkan ol-duğ-u için]
   Ali-NOM Ayşe-ACC hardworking be-DIK-POSS.3.SG since
   sev-iyor-Ø
   like-IMPERF-3.SG
   ‘Ali likes Ayşê because she is hardworking.’

This shows us that nominalizations cannot function as adjuncts unless they receive lexical case. The question of whether such lexical case-marked nominalizations are embedded under a null P head, or the marker itself is the P head, is beyond the scope of this paper.

2.6 Dependent Case Assignment

Marantz (1991) defines dependent case assignment as follows:

(9) If there are two NPs in the same VP-phase such that NP₁ c-commands NP₂, then value the case of NP₁ as dative unless NP₂ has already been marked for case.

According to this definition, when a nominalized clause appears in the direct object position of a causative verb, we expect accusative case on the nominalization and dative case on the second object if these nominalizations are DPs in their outer-most layer. Indeed this is the case, as (10) shows.

(10) a. Ali-Ø sana [ev-in yıkm-in]-ı
   Ali-NOM you.DAT house-GEN destroy-İm-POSS.3.SG-ACC
   izle-t-ti- Ø
   watch-CAUS-PST-3.SG
   ‘Ali made you watch the destruction of the house.’

b. Ali-Ø sana [Ayşê-nin gid-iş-in]-i
   Ali-NOM you.DAT Ayşê-GEN leave-İş-POSS.3.SG-ACC
   izle-t-ti-Ø
   watch-CAUS-PST-3.SG
   ‘Ali made you watch the way Ayşê left.’
c. Ali-Ø sana [Ayşenin git-tiğ-in]-i
Ali-NOM youDAT Ayşen GEN leave-IŞ-POSS.3 SG-ACC
düşün-dür-dü-Ø
think-CAUS-PST-3 SG
‘Ali made you think that Ayşen left.’

d. Ali-Ø sana [Ayşenin git-me-sin]-i
Ali-NOM youDAT Ayşen GEN leave-mA-POSS.3 SG-ACC
söyle-t-ti-Ø
tell-CAUS-PST-3 SG
‘Ali made you tell that Ayşen must leave/ tell Ayşen to leave.’

According to the tests we applied in this section it looks as though in the outermost layer these forms are indeed DPs, as depicted in (11). The next question is at which layer the D⁰ kicks in, which we try to answer in the following section.

(11)

3 Internal Structure of the Nominalized Clauses

3.1 {-DIK} Nominalizations

When we try to modify an embedded clause formed with the nominalizer {-DIK} with the adverbs listed in Cinque (1999), the ungrammaticality of (12a) and (12c) shows that among the functional layers that a {-DIK} nominalization consists of, Mood_{speech act}, Mood_{evaluative}, Mood_{evidential}, Mod_{epistemic} and T(future), Mood_{irrealis}, Mod_{necessity}, and Mod_{possibility} seem to be missing.² The clause size being smaller than a full-CP can account for the absence of the top four functional layers.

² For the adverbs lower than usually see the appendix.

  git-tiğ-in-i   duy-du-Ø
leave-DIK-POSS.3SG-ACC hear-PST.3.SG
Intended: ‘Ayşe heard that Ali honestly/luckily/allegedly/probably left.’

b. Ayşe-Ø Ali-nin bir zamanlar Türkiye-ye git-tiğ-in-i
Ayşe-NOM Ali-GEN once Turkey-DAT go-DIK-POSS.3SG-ACC

duy-du.
hear-PST.3.SG
‘Ayşe heard that Ali went to Turkey once.’

c. Ayşe-Ø Ali-nin (*belki/*muhakkak/*bir ihtimal) Ayşe-NOM Ali-GEN maybe / necessarily / possibly

  git-tiğ-in-i   duy-du-Ø
leave-DIK-POSS.3SG-ACC hear-PST.3.SG
Intended: ‘Ayşe heard that Ali maybe/necessarily/possibly left.’

d. Ayşe-Ø Ali-nin genelikle ders-e katıl-dığ-in-i
Ayşe-NOM Ali-GEN usually class-DAT participate-DIK-POSS.3SG-ACC

duy-du-Ø
hear-PST.3.SG
‘Ayşe heard that Ali usually participates in class.’

Since the top-most compatible adverb bir zamanlar ‘once’ targets T(Past), we can conclude that {-DIK} nominalizations can go up to that point, and this is the layer where D₀ is merged. This makes them DP-shelled TPs, schematized in (13).

(13)  [frankly Moodspeech act] [fortunately Mood evaluative] [allegedly Mood evidential]
[probably Mod epistemic] [once T(past)] [then T(future)] [perhaps Mood unreals]
[necessarily Mod necessity] [possibly Mod possibility] [usually Asp habitual]
[again Asp repetitive(I)] [often Asp frequentative(I)] [intentionally Mod volitional]
[quickly Asp celerative(I)] [already T(anterior)] [no longer Asp terminative]
[still Asp continuative] [always Asp perfect?] [just Asp retrospective] [soon Asp proximative]
[briefly Asp durative] [characteristically?] Asp generic/progressive [almost Asp prospective]
[completely Asp Sg Completive(I)] [tutto Asp PI Completive] [well Voice] [fast/early]
Asp celerative(II)] [again Asp repetitive(II)] [often Asp frequentative(II)] [completely]
Asp Sg Completive(II)] … V
The ungrammaticality of (12c) resulting from the apparent gap between the T(Past) and Asp\textsubscript{habitual} begs for an additional explanation. I reason that this stems from lexical blocking. Namely, the matrix predicate selects for the more specific {-\texttt{(y)AcAK}} form when the subordination denotes possibility/certainty in the future. In fact, when we test these adverbs with {-\texttt{(y)AcAK}} nominalizations, this gap seems to be filled.

(14) Ayşe-Ø Ali’nin o zaman/belki/ muhakkak/ bir ihtimal
Ayşe-NOM Ali-GEN then/ maybe / necessarily / possibly

gid-\textsc{eceğ-in-i} duy-du-Ø
leave-\textsc{yAcAK-POSS.3.SG-ACC hear-PST.3.SG}
Intended: ‘Ayşe heard that Ali then/maybe/necessarily/possibly will leave.’

To summarize, we concluded that \{-\textsc{DIK}\} clauses can take up to T(Past) layer adverbs, with {-\texttt{(y)AcAK}} as a more specific form blocking the usage of \{-\textsc{DIK}\} in contexts referring to future certainty/possibility. Thus, they must be TPs taken as a complement by a D\textsuperscript{0}.

3.2 \{-\texttt{mA}\} Nominalizations

Let us now test which adverbs \{-\texttt{mA}\} clauses can host:

(15) a. Ayşe-Ø Ali’nin (*açıkçası/*Allah’tan/*sözde) okul-u
Ayşe-NOM Ali-GEN honestly/ luckily/ allegedly school-ACC

bitir-me-sin-e sevin-di-Ø
finish-mA-POSS.3.SG-DAT be.glad-PST.3.SG
Lit. Meaning: ‘Ayşe was glad that Ali honestly/ luckily/ allegedly graduated.’

b. Ali’nin teklif-i muhtemelen reddet-ecek ol-ma-sı-Ø
Ali-GEN offer-ACC probably reject-FUT be-mA-POSS.3.SG-NOM

Ayşe-yi şaşırt-tı-Ø
Ayşe-ACC surprise-PST.3.SG
Intended: ‘That Ali probably rejected the offer surprised Ayşe.’

c. Ayşe-Ø Ali-nin bir zamanlar hukuk oku-muş
Ayşe-NOM Ali-GEN once law study-PERF
The incompatibility of the adverbs *açıkçası* ‘honestly’, *Allah’tan* ‘luckily’, and *sözde* ‘allegedly’ in (15a) with the nominalizations formed by {*-mA*} provides evidence that the Moodspeech act, Moodevaluative, Moodevidential, and Modepistemic layers are absent in these embedded clauses, as depicted in (16).

\[
(16) \quad \text{[frankly Moodspeech act [fortunately Moodevaluative [allegedly Moodevidential}
\]

\[
\text{[probably Modepistemic [once T(past) [then T(future) [perhaps Moodirrealis}
\]

\[
\text{[necessarily Modnecessity /[possibly Modpossibility [usually Asphabitual}
\]

\[
\text{[again Asprecipitative(I) [often Aspfrequentative(I) [intentionally Modvolitional}
\]

\[
\text{[quickly Aspeventative(I) [already T(anterior) [no longer Aspperminative}
\]

\[
\text{[still Aspcontinutive [always Aspperfect(?) [just Aspretrospective [soon Aspproximative}
\]

\[
\text{[briefly Asphabitual [characteristically(?) Aspgeneric/progressive [almost Aspprospective}
\]

\[
\text{[completely AspSgCompletive(I) [tutto AspP1Completive [well Voice [fast/early}
\]

\[
\text{Aspeventative(II) [again Asprecipitative(II) [often Aspfrequentative(II) [completely}
\]

\[
\text{AspsgCompletive(II)…V}
\]

The rest of the adverbs seem to be compatible,\(^3\) which again suggests that {*-mA*} clauses are DP-shelled TPs. What is different than {*-DIK*} clauses is that in {*-mA*}

\(^3\) For the adverbs lower than *usually* see the appendix.
clauses, when the embedded clause refers to a different time than the matrix predicate or to a possibility, the TAM marker on the embedded predicate must be overt and the light verb *ol*- ‘to be’ hosts the nominalizer {*mA*}, observed in (15b-d).

### 3.3 {*DIK*} vs. {*mA*} Clauses

At this point, since both {*DIK*}/-(y)AcAK} and {*mA*} clauses seem to be TPs under a DP, one obvious question to ask is what the motivation behind these different nominalizers might be. One immediate option is that one of them denotes factivity while the other does not. However, either nominalizer can form a factive (17b,c) or a non-factive (17a,d) embedded clause.

(17) a. Ali-nin dün gel-me-sin-i iste-di-m,
    Ali-GEN yesterday come-mA-POSS.3.SG-ACC want-PST-1.SG PST.3.SG

    ama o gel-me-di-Ø
    but he come-NEG-PST-3.SG
    ‘I wanted Ali to come yesterday, but he did not.’

b. #Ali-nin dün gel-me-sin-e sevin-di-m,
   Ali-GEN yesterday come-mA-POSS.3.SG-DAT be.glad-PST-1.SG

   ama o gel-me-di-Ø
   but he come-NEG-PST-3.SG
   Intended: ‘I was glad that Ali came yesterday, but he did not.’

c. #Ali-nin dün gel-diğ-in-i gör-dü-m,
   Ali-GEN yesterday come-DIK-POSS.3.SG-ACC see-PST-1.SG

   ama o gel-me-di-Ø
   but he come-NEG-PST-3.SG
   Intended: ‘I saw that Ali came yesterday, but he did not.’

d. Ali’nin dün gel-diğ-in-i san-di-m,
   Ali-GEN yesterday come-DIK-POSS.3.SG-ACC think-PST-1.SG

   ama o gel-me-miş-Ø
   but he come-NEG-EVID.3.SG
   ‘I thought that Ali came yesterday, but it turns out that he did not.’
The sentences in (17b-c) become semantically odd when we cancel, since the nominalizations are factive, while in others it is possible to cancel. It seems {-DIK} and {-mA} clauses are selected by different factive and non-factive predicates (for a detailed account, see Erguvanlı-Taylan; 1998, 2014).

3.4 \{-y\}ş Nominalizations

When we modify \{-y\}ş clauses with Cinque’s (1999) adverbs, what we see is that any adverb above genellikle ‘usually’ yields ungrammaticality, as shown in (19a-b).4 This suggests the functional layers above Asp\textsubscript{Habitual} are absent in \{-y\}ş clauses.

\begin{enumerate}
\item (18) \begin{align*}
\text{[frankly Mood}\text{speech}\text{act} & \text{[fortunately Mood}\text{evaluative} \text{[allegedly Mood}\text{evidential}]} \\
\text{[probably Mod}\text{epistemic} & \text{[once T(past) \text{[then T(future)]}}} & \text{[perhaps Mod}\text{irrealis}] \\
\text{[necessarily Mod}\text{necessity} & \text{[possibly Mod}\text{possibility}} & \text{[usually Asp}\text{habitual}] \\
\text{[again Asp}\text{repetitive(I) \text{[often Asp}\text{frequentative(I)]}}} & \text{[intentionally Mod}\text{volitional}] \\
\text{[quickly Asp}\text{celetative(I) \text{[already T(anterior)]}}} & \text{[no longer Asp}\text{terminative}] \\
\text{[still Asp}\text{continuative \text{[always Asp}\text{perfect(?)]}}} & \text{[just Asp}\text{retrospective \text{[soon Asp}\text{proximative}]}} \\
\text{[briefly Asp}\text{durative \text{[characteristically(?)]}}} & \text{[Asp}\text{generic/progressive \text{[almost Asp}\text{prospective}]}} \\
\text{[completely Asp}\text{SgCompletive(I) \text{[tutto Asp}\text{PfCompletive}]}} & \text{[well Voice \text{[fast/early Asp}\text{couterative(I)]}}} \\
\text{[again Asp}\text{repetitive(II) \text{[often Asp}\text{frequentative(II)]}}} & \text{[completely Asp}\text{SgCompletive(II)\ldots V}}
\end{align*}
\end{enumerate}

\begin{enumerate}
\item (19) a. Ayşe-Ø Ali-nin (*açıkçası/*Allah’tan/*sözde/*muhtemelen) okul-u
\begin{align*}
\text{Ayşe-NOM} & \text{Ali-GEN honestly/ luckily/ allegedly/ probably school-ACC} \\
\text{bitir-iş-in-i} & \text{anlat-ti-Ø} \\
\text{finish-yiş-POSS.3.SG-ACC tell-PST.3.SG} \\
\text{Lit. Meaning: ‘Ayşe told (me) Ali’s honestly/ luckily/ allegedly/ probably graduating.}
\end{align*}
\item b. Ayşe-Ø Ali-nin (*bir zamanlar/*belki) hukuk oku-yuş-un-a
\begin{align*}
\text{Ayşe-NOM} & \text{Ali-GEN once/ maybe law study-yiş-POSS.3.SG-DAT} \\
\text{şasır-di-Ø} & \text{be.surprised-PST.3.SG} \\
\text{Lit. Meaning: ‘Ayşe was surprised at Ali’s once/ maybe studying law.’}
\end{align*}
\end{enumerate}

\textit{4} For adverbs lower than \textit{often} see the appendix.
c. Ayşe-Ø Ali-nin genellikle yine/ sık sık ders-e geç
Ayşe-NOM Ali-GEN usually/ again/ often class-DAT late
gel-iş-in-e kız-dı-Ø
come-Iş-POSS.3.SG-DAT be.angry-PST.3.SG
‘Ayşe was angry at Ali’s usually/ again/ often coming late to the class.’

Given the ungrammaticality of (19a-b) and the grammaticality of (19c), we can conclude that the top-most functional layer in {-(y)Iş} clauses is Asphabitual, and thus they are AspPs taken as a complement by the D0. This makes them shorter than {mA} and {DIK} clauses, which we claim are TPs.

3.5 {Im} Nominalizations

Compared to the other nominalized clauses we investigated, {Im} nominalizations seem to be the smallest. Firstly, they cannot take an external argument. When we try to add an agent to the structure in (20), it becomes marked for some speakers and ungrammatical for others.

(20) ??/* Ali-nin ev-i yık-im-i iş-i
Ali-GEN house-ACC destroy-Im-POSS.3.SG work-ACC
kolaylaşt-tr-dı-Ø
become.easy-CAUS-PST-3.SG
Intended: ‘Ali’s destruction of the house made things easier.’

Secondly, as Tenny and Pustejovsky (2000) state, measure and restitutive adverbs are closer to the verb. These correspond to the aspectual adverbs lower than vP in Cinque’s (1999) system, which are compatible with {Im} for some speakers, shown in (21a-b). On the other hand, modifying these nominalizations with the adverbs targeting the vP layer and above yield ungrammaticality, as in (21c-d).

(21) a. %Ev-in sık sık yık-im-i-Ø aile-yi üz-dü.
House-GEN often destroy-Im-POSS.3.SG-NOM family-ACC upset-PST
Lit. Meaning: ‘Frequently destroying the house upset the family.’
b. % Köprü-nün tekra\textit{r} k\textit{i}m\textit{s}en bak-im-ı-Ø tra\textit{f}i\textit{f}-e
Bridge-GEN again partially repair-Im-POSS.3.SG-NOM traffic-DAT

neden ol-du-Ø
cause be-PST-3.SG
Lit. Meaning: ‘Again partially repairing the bridge has caused traffic.’

c. *Ev-in \textit{g}"\textit{uz}elce bak-im-ı-Ø uzun s"\textit{u}r-d"\textit{ü}-Ø
House-GEN nicely repair-Im-POSS.3.SG-NOM long last-PST-3.SG
Lit. Meaning: ‘Nicely repairing the house took long.’

d. *Bebe\textit{g}-\textit{i}n dün öl-üm-ü-Ø aile-yi üz-dü-Ø
Baby-GEN yesterday die-Im-POSS.3.SG-NOM family-ACC upset-PST-3.SG
Lit. Meaning: ‘The baby’s death yesterday upset the family.’

The data above suggest that little-\textit{v}^0 is missing in \{-Im\} nominalizations and there is speaker variation regarding the presence of Aspectual layers below the little-\textit{v} in Cinque’s (1999) system (22).

(22) ... [well Voice [fast/early As\textit{p}ce\textit{lerative}(II) [again As\textit{p}re\textit{petitive}(II) [often As\textit{p}fr\textit{equentative}(II) [completely As\textit{p}SgCom\textit{pletive}(II) ... V

Given that little-\textit{v}^0 is absent and there is speaker variation for the existence of the aspectual layers below little-\textit{v}^0, \{-Im\} nominalizations seem to be VPs embedded under a DP. This makes them the shortest structure among the four nominalizations investigated.

One additional piece of data indeed proves this. Except for \{Im\}, all other nominalizers can form subordinations with negated predicates and license an NPI in subject position.

(23) a. *[\textit{H}içb"\textit{ir} şey-in \textit{y}ık-\textit{m}a-yım-ı]
nothing-GEN destroy-NEG-Im-POSS.3.SG

b. *[\textit{H}içb"\textit{ir} şey-in \textit{y}ık-\textit{i}l-\textit{m}a-yaş-ı / \textit{y}ık-\textit{i}l-\textit{m}a-ṣı / \textit{y}ık-\textit{i}l-\textit{m}a-d"\textit{i}g-ı]
nothing-GEN destroy-PASS-NEG-\textit{I}ṣ/-m\textit{A}/-DIK-POSS.3.SG
Intended: ‘Destruction of nothing’

4 Summary & Conclusion

In this paper, we first established that the nominalizations formed with \{-DIK\}, \{-mA\}, \{-y\}Iṣ and \{-Im\} are DPs by testing them in various argument positions, in
adjunct position and also in the dependent case assignment system in Section 2. In addition, to see above which functional layer the $D^0$ is merged, we tested the clause sizes with adverbial modification based on Cinque’s (1999) analysis. With the results of the tests applied summarized in Table 1 below, we conclude that comparison of the clause sizes leads to the analysis illustrated in (24).

Table 1

<table>
<thead>
<tr>
<th>Test/ Nominalizer</th>
<th>{-DIK}</th>
<th>{-mA}</th>
<th>{-(y)I$\ddot{s}$}</th>
<th>{-Im}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument Positions</td>
<td>Complement to a Predicate</td>
<td>Any</td>
<td>Any</td>
<td>Any</td>
</tr>
<tr>
<td>Functioning as an Adjunct</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Triggering DAT</td>
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<td>up to AspP layer</td>
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(24)

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APPENDIX

(1) {-DIK}

(a) Ayşenin yine ders-e geç gel-diğ-i duy-du.
   ‘Ayşe heard that Ali has again come to class late.’

(b) Ayşenin sık sık ders-e geç gel-diğ-i duy-du.
   ‘Ayşe heard that Ali often comes late to the class.’

(c) Ayşenin iş-e isteyerek git-tiğ-i duy-du.
   ‘Ayşe heard that Ali goes to work willingly.’

(d) Ayşenin hızlıca dışarı git-tiğ-i görüdü.
   ‘Ayşe saw that Ali went outside quickly.’

(e) Ayşenin zaten git-tiğ-i duy-du.
   ‘Ayşe heard that Ali has already left.’

(f) Ayşenin artık iş-e gel-me-diğ-i duy-du.
   ‘Ayşe heard that Ali does not come to work any more.’

(g) Ayşenin hala çalış-tiğ-i duy-du.
   ‘Ayşe heard that Ali is still working.’

(h) Ayşenin her zaman ders çalış-tiğ-i duy-du.
   ‘Ayşe heard that Ali always studies.’

(i) Ayşenin geçenlerde git-tiğ-i yeni duy-du.
   ‘Ayşe just heard that Ali has recently gone.’
(j) Ayşe Ali’nin **hemen** git-tiğ-in-i **duy-du.**  
Ayşe-NOM Ali-GEN immediately leave-DIK-POSS.3.SG-ACC hear-PST.3.SG  
‘Ayşe heard that Ali immediately left.’

(k) Ayşe Ali’nin bu ders-ten **neredeyse** kal-diğ-in-ı **duy-du.**  
Ayşe-NOM Ali-GEN this course-ABL almost fail-DIK-POSS.3.SG-ACC hear-PST.3.SG  
‘Ayşe heard that Ali almost failed this course.’

(l) Ayşe Ali’nin sigara-yı **tamamen** bırak-tiğ-in-ı **duy-du.**  
Ayşe-NOM Ali-GEN cigarette-ACC completely quit-DIK-POSS.3.SG-ACC hear-PST  
‘Ayşe heard that Ali quit smoking completely.’

(m) Ayşe Ali’nin ödev-i **iyi** yap-tiğ-in-ı **gör-dü.**  
Ayşe-NOM Ali-GEN assignment-ACC well do-DIK-POSS.3.SG-ACC see.PST.3.SG  
‘Ayşe saw that Ali did the assignment well.’

(2) **{-mA}**

(a) Ayşe Ali’nin **yine** ders-e gel-me-sin-e ** şaşır-dı.**  
Ayşe-NOM Ali-GEN again class-DAT come-mA-POSS.3.SG-DAT be.surprised-PST  
‘Ayşe was surprised that Ali came the class again.’

(b) Ayşe Ali’nin **sık sık** ders-e gel-me-sin-e **sevin-iyor.**  
Ayşe-NOM Ali-GEN often class-DAT come-mA-POSS.3.SG-DAT be.glad-IMPERF  
‘Ayşe is happy that Ali comes often to the class.’

(c) Ayşe Ali’nin okul-a **isteyerek** devam et-me-sin-e **sevin-di.**  
Ayşe-NOM Ali-GEN school-DAT willing continue-mA-POSS.3.SG-DAT be.glad-PST  
‘Ayşe was happy that Ali continues to his studies willingly.’

(d) Ayşe Ali’nin ev-e **hızlıca** gel-me-sin-e **şAŞır-dı.**  
Ayşe-NOM Ali-GEN house-DAT quickly come-mA-POSS.3.SG-DAT be.surprised-PST  
‘Ayşe was surprised that Ali came home quickly.’

(e) Ayşe Ali’nin **zaten** gel-miş ol-ma-sin-a **şAŞır-dı.**  
Ayşe-NOM Ali-GEN already come-EVID be-mA-POSS.3SG-DAT be.surprised-PST  
‘Ayşe was surprised that Ali has already come home.’

(g) Ayşe Ali’nin hala ders çalışma-sın-a şaşır-dı. Ayşe-NOM Ali-GEN still study-mA-POSS.3.SG-DAT be.suprised-PST.3.SG ‘Ayşe was surprised that Ali was still studying.’


(i) Ayşe Ali’nin geçenlerde geri dön-me-sin-e sevin-di. Ayşe-NOM Ali-GEN recently back come-mA-POSS.3.SG-DAT be.happy-PST.3.SG ‘Ayşe was happy that Ali has recently came back.’


(k) Ayşe Ali’nin bu ders-ten az daha kal-ma-sın-a şaşır-dı. Ayşe-NOM Ali-GEN this course-ABL almost fail-mA-POSS.3.SG-DAT be.suprised-PST ‘Ayşe was surprised (to hear) that Ali almost failed this course.’


(m) Ayşe Ali’nin ödev-i iyi yap-ma-sın-a sevin-di. Ayşe-NOM Ali-GEN assignment-ACC well do-mA-POSS.3.SG-DAT be.happy-PST.3.SG ‘Ayşe was happy that Ali did his assignment well.’

(3) {
(y)iş
(b) Ayşe Ali’nin **hızlıca** dışarı çık-ış-in-ı gör-dü.
Ayşe-NOM Ali-GEN quickly outside exit-Iṣ-POSS.3.SG-ACC see-PST.3.SG
‘Ayşe saw Ali going out quickly.’

(c) Ayşe Ali’nin **zaten** git-miş ol-uş-un-a şaşır-dı.
Ayşe-NOM Ali-GEN already go-EVID be-Iṣ-POSS.3.SG-DAT be.surprised-PST.3.SG
‘Ayşe was surprised that Ali’s already gone.’

(d) Ayşe Ali’nin **artık** iş-e gel-me-yiş-in-e
Ayşe-NOM Ali-GEN any more work-DAT come-NEG-Iṣ-POSS.3.SG-DAT
şaşır-dı.
be.surprised-PST.3.SG
Lit. Meaning: ‘Ayşe got used to Ali’s not coming to work any more.’

(e) Ayşe Ali’nin **hala** ev-e dön-me-yiş-in-e kız-dı.
Lit. Meaning: ‘Ali’s always participating in class makes Ayşe happy.’

(f) Ali’nin derse **her zaman** katıł-ış-ı Ayşe’yı
Ali-GEN class-DAT always participate-Iṣ-POSS.3.SG-NOM Ayşe-ACC
sevindir-iyor.
make.happy-IMPERF-3.SG
Lit. Meaning: ‘Ali’s always participating in class makes Ayşe happy.’

(g) Ayşe Ali’nin **geçenlerde** iş-ten ayrıl-ış-in-dan bahset-ti.
Ayşe-NOM Ali-GEN recently work-ABL leave-Iṣ-POSS.3.SG-ABL mention-PST.3.SG
‘Ayşe talked about/mentioned (how) Ali has recently left/quit work.’

(h) Ayşe Ali’nin ev-den **hemen** gid-iş-in-i anlat-tı.
‘Ayşe told how Ali immediately left the house.’

Ayşe-NOM Ali-GEN almost bridge-ABL fall-Iṣ-POSS.3.SG-ACC see-PST.3.SG
‘Ayşe saw how Ali almost fell off the bridge.’

(j) Ayşe Ali’nin sigara-yı **tamamen** bırak-ış-in-ı anlat-tı.
Ayşe-NOM Ali-GEN cigarette-ACC completely quit-Iṣ-POSS.3.SG-ACC tell-PST.3.SG
‘Ayşe told how Ali quit smoking completely.’
REFERENCES


