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**FROM CONVERB TO CLAUSAL SUBJECT? A MINIMALIST
APPROACH TO THE STATUS OF {-(y)Ali} ELEMENTS IN TURKISH**

*Zarf-fülden Cümle Özneye mi? Türkçede {-(y)Ali} Ögelerinin Konumuna Yetinmeci Bir
Yaklaşım*

Araştırma Makalesi / Research Article

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Sorumlu Yazar

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Abstract

{-(y)All} is a suffix widely attested in both historical and modern Turkish and exhibits a range of functions. In grammars of modern Turkish, it is generally analyzed only as a converb suffix. However, it may be considered that the suffix also exhibits event-denoting clausal subject uses in contemporary Turkish novels. In these cases, the forms to which the suffix is attached function not as adverbial clauses but as event clauses serving as subjects. This appears to be a syntactic process rather than a morphological one. The Minimalist Program is a theoretical framework that aims to explain the functioning of language in an economical and simplified way, based on principles and theories such as representational and derivational economy, Bare Phrase Structure Theory, and Relativized Minimality. This paper focuses on the functions in question, particularly in modern Turkish, and proposes a syntax-based approach grounded in the Minimalist Program. It also relates these quasi verbal-noun uses to another common narrative pattern in Turkish. The study adopts a partially diachronic perspective, since tracing the suffix through historical texts helps clarify its functional development. Although grammars of historical Turkish (or Turkic) tend to examine this suffix within a broader functional framework than modern grammars, both modern and historical Turkish grammars are limited by their insufficient attention to syntax and linguistic theories. Yet when a suffix appears in subordinate clauses, its function can only be accurately identified through syntactic analysis. Therefore, this paper places emphasis on syntax and the principles and theories of the Minimalist Program.

Key Words: {-(y)All}, converbs, clausal subject, syntax, minimalism.

Özet

{-(y)All} eki, hem tarihî hem de bugünkü Türkçede yaygın olarak tanıklanan ve çeşitli işlevler üstlenen bir ektir. Modern Türkçenin gramerlerinde genellikle yalnızca zarf-fiil eki olarak analiz edilir. Ancak çağdaş Türk romanlarında bu ekin olay belirten cümle özne kullanımları sergilediği de düşünülebilir. Bu kullanımda ekin bağlı olduğu biçimler, zarf tümleci değil, özne işlevi gören olay cümleleri olarak ortaya çıkmaktadır. Bu, morfolojik değil, sentaktik (söz dizimsel) bir süreç gibi görünmektedir. Yetinmecî Program, dil yetisinin ekonomik ve yalın bir biçimde işleyişini açıklamayı amaçlayan; temsilî ve üretici ekonomi, Yalın Öbek Yapısı Kuramı ve Görecelendirilmiş Yetinmecilik gibi ilke ve kuramlara dayanan bir kuramsal çerçevedir. Bu çalışma, özellikle modern Türkçede söz konusu işlevleri incelemekte ve Yetinmecî Program'a dayalı söz dizimsel bir yaklaşım önermektedir. Ayrıca, söz konusu görünürde isim-fiil işlevlerini Türkçede yaygın bir başka anlatı kalıbıyla ilişkilendirir. Ekin tarihî metinler üzerinden izlenmesi, işlevsel gelişiminin anlaşılmasına katkı sağladığından, çalışma kısmen tarihî bir perspektif benimsemektedir. Tarihî Türkçe (veya Türk dilleri) gramerleri bu eki genellikle daha geniş bir işlevsel çerçevede değerlendirmiştir. Buna karşılık, hem modern hem de tarihî Türkçe gramerleri, dil bilimi kuramları ve söz dizimine yeterince odaklanmamışlardır. Ancak bir ek yan cümlelere geldiğinde, işlevi ancak söz dizimsel analiz yoluyla doğru bir şekilde belirlenebilir. Bu nedenle, bu çalışma özellikle söz dizimi ve Yetinmecî Program'ın ilke ve kuramlarına vurgu yapmaktadır.

Anahtar Sözcükler: {-(y)All}, zarf-fiiller, cümle özne, söz dizimi, yetinmecilik.

INTRODUCTION

{-(y)AlI} or {-GAlI} is a suffix documented as early as the Orkhon Inscriptions, the earliest written sources of the Turkic languages. As no variants of the suffix are attested in Chuvash and Yakut (Yüceol Özezen 2018: 91), it may be considered a relatively recent suffix. Chuvash is generally believed to have diverged from Proto-Turkic shortly before the beginning of the Common Era, while Yakut branched off shortly afterward (Alturan 2024: 283; Savelyev 2020: 450). In Chuvash, the suffix {-näranpa} is used in place of {-(y)AlI} (Krueger 1961: 166). This suffix can easily be identified as a completely different formation. Although the suffix {-ArI}, which is used as an equivalent form in Yakut, appears to be typologically similar to {-(y)AlI} due to the common Turkic -l > -r correspondence in Yakut, it is regarded as a distinct suffix. Pakendorf (2007) analyzes the suffix as an extended form consisting of a participial suffix combined with the accusative case marker. The researcher further argues that the participle may have either developed through the grammaticalization of a descriptive compound verb or emerged as a borrowing or structural calque influenced by Mongolic or Tungusic languages (236–237).

In all other Turkic languages, {-(y)AlI} has two main functions: First, it indicates the intention of the predicate verb, serving a function comparable to the infinitive in other languages. The subordinate form to which it is attached functions as an adverb of intention or, when it takes complements, as an adverbial clause. Second, it indicates that the time of the subordinate event precedes that of the predicate verb, a function similar to the preposition *since* in the perfect tense in Indo-European languages. The suffix {-GAlI}, which forms descriptive compound verbs expressing actionality, ability, and similar meanings, seems to represent a secondary function of the {-GAlI} that marks intention (Erdal 2004: 317, 479). The intention function is not used in Oghuz languages, except in historical Turkmen (Hünerli 2012: 197). In present-day Turkish, it functions as *since* and, depending on the context, can also convey meanings such as *as long as*, *ever since*, and *never*, indicating whether the action of the converb occurred shortly or long before the predicate, as in “Babam gideli çok şey değişti.” (Since my father left, many things have changed.) and “Türkiye Türkiye olalı böyle afet görmedi.” (Turkey has never seen such a disaster.). To intensify the meaning and emphasize that a long time has passed, it can also be expressed through reduplication or with a particle phrase using *beri*: “Kendimi bildim bileli bu işle uğraşırım.” (I have been engaged in this work for as long as I can remember.), “Köy boşaltılalı beri kimsenin yüzü gülmedi.” (No one has smiled since the village was evacuated.).

In various linguistic studies, clauses that function as temporal adverbials in main clauses are often referred to as temporal clauses or subordinates (Baydal & Yazar 2024: 349; Guillaume 2014; Martínez 2023: 65). However, this definition might not be entirely suitable for time-indicating adverbial structures in Turkish, because forms such as *gittiğinde* “when he went” and *gelirken* “when he came” inherently encode past and present temporal meanings, whereas structures formed with {-(y)AlI} do

not intrinsically convey temporal meaning. Although they indicate the starting point of the action in the main clause, they do not carry modal meanings in and of themselves. Another difference from other temporal complements is that it indicates the event that initiated the action of the verb in the main clause. In the sentence “Babası öleli tarlaları oğlu sürüyor.” (Since his father died, his son has been cultivating the fields.) *öleli* indicates not only the starting time of the verb *sürüyor* but also the event that triggered the action. Furthermore, this structure is not used as a single element; it has a subject or another complement that is either shared with the main clause or distinct from it. For example, in the sentence “Emekli olalı iki ay oldu.” (It has been two months since retired.), the {-(y)AlI} element contains an explicit or implicit subject, as reflected in variations such as “Ben/sen/o emekli olalı iki ay oldu.” (It has been two months since I/you/he/she retired.). For these reasons, it would be more appropriate to adopt the term *event clause* for structures formed with the {-(y)AlI} suffix, and this paper does so.

It is also widely used in Turkish in sentences whose predicate is formed by the auxiliary verb *ol-*, as a means of translating English “It has been since...” constructions. Despite the fact that Turkish does not possess a perfect tense category, these structures may have entered and become widespread in Turkish through translation efforts: “Karım gideleli iki yıl oldu.” (It has been two years since my wife left) and “Evden çıkaleli on dakika oluyor.” (It has been ten minutes since I left the house). It is noteworthy that the compound “to be X seconds, minutes, days, months, years, centuries” follows exactly the same structural pattern as the compound “X saniye, dakika, gün, ay, yıl, yüzyıl olmak.”. These phrases can be described as combinations of a temporal noun and an auxiliary verb. It would be a mistake to assume that the auxiliary verb is used in the same way as a main verb. In English idiomatic constructions, the pronoun *it* refers to the clause introduced by *since*. In Turkish sentences, however, elements marked with the suffix {-(y)AlI} appear to serve the same function in place of this pronoun.

The author of the paper encountered a sentence such as “Körpe savaşçılar saatlerden beri dövüşüyorlarmış duygusuna kapıldıkları hâlde *vuruşaleli* iki dakikayı doldurmamıştı.” (Although the young warriors felt as if they had been fighting for hours, not even two minutes had passed since the battle began.) in *Devlet Ana* (K. Tahir, 2010: 638). This type use of the suffix {-(y)AlI} may be a neologism coined by Kemal Tahir; however, a similar use is also attested in Fakir Baykurt's *Tırpan*, Tomris Uyar's *Şen Ol Bayburt*, and Yaşar Kemal's *Demirciler Çarşısı Cinayeti*:

“Epeydir veremedik. Bir yılı aşiyor *alalı*.” (We haven't been able to pay it back for quite some time. Its been over a year since we borrowed it.) (Baykurt 1973: 195).

“Bak, sen *geleli* yarım saati geçti.” (Look, it's been over half an hour since you got here.) (Uyar 2009: 30).

“Bak, *çeltik kalkalı, satılalı* nicedir, niye vermedi senin paranı kaç aydır?” (Look, it's been a long time since the rice was harvested and sold. Why hasn't he paid your money for months?) (Kemal 2016: 397).

These authors were born and raised in different regions of Anatolia. Although both K. Tahir and T. Uyar were born in Istanbul, the former spent most of his life in different parts of Anatolia. These uses are not ungrammatical, because they have a clear interpretation in the minds of native speakers. For instance, a sentence like “Mezun olalı beş yılı geçiyor.” (It has been more than five years since I graduated.) can be easily understood by Turkish speakers. The main problem with such sentences concerns the identification of their subjects. If the explanations offered in Turkish grammars, especially modern ones, are taken into consideration, as will be discussed at length in the chapters below, their subject is analyzed as the pronoun *o*, treated as a covert (implicit) subject, since {-(y)All} is widely referred to in Turkish grammars as merely a converb suffix. However, rather than searching for a hidden subject, it is much more logical to treat the elements bearing the suffix {-(y)All} themselves as the subject, because positing a covert subject in this case is a rather forced approach.

The same problem arises in sentences whose predicates consist of time expressions such as *dakika, saat, gün, ay*, etc. (minute, hour, day, month, etc.) combined with the auxiliary *ol-*. In sentences like “Emekli olalı iki ay oldu.”, the phrase *iki ay* and the auxiliary *ol-* are in an indispensable relationship and together form a single predicate phrase. The question then becomes how to identify the subject. If we again rely on the views presented in Turkish grammars, we would be expected to analyze the elements bearing the {-(y)All} suffix as adverbs and to search instead for the covert pronoun *o* as the subject. However, a sentence like *Emekli olalı *o* iki ay oldu where we put the pronoun *o* as the subject, would be grammatically incorrect and would mean nothing to Turkish speakers. The same holds true for the subjects of the sentences in the novels of Kemal Tahir, Fakir Baykurt, and Yaşar Kemal, as well as in the short story by Tomris Uyar. Why must we look for pronouns at all? Could the element bearing the suffix {-(y)All} not function as the subject in these sentences, at least at the syntactic level? The paper's author argues that various principles of the Minimalist Program, including Relativized Minimality, Bare Phrase Structure Theory, and representational and derivational economy, may offer a possible solution to the subject problem. In this context, although grounded in a minimalist approach, this paper, where appropriate, engages with perspectives that challenge the tenets of the Minimalist Program, and also revisits earlier theoretical proposals concerning Universal Grammar's architecture — such as X-bar Theory — that preceded the Minimalist Program and were subsequently reanalyzed within it. Before providing an overview of the principles, it briefly addresses why languages employ these principles and then introduces core syntactic terms such as argument, thematic role, and subject types within the sections on argument structure and interrogative forms. The treatment of the suffix in historical and modern grammars, including contemporary Turkish syntax books, is also reviewed before transitioning to the Minimalist analysis.

1. The Treatment of the Suffix {-(y)All} in Grammatical Descriptions

1.1. Grammars of Modern Turkish

Korkmaz (2009: 1009–1010), Ergin (2009: 342), Banguoğlu (1974), Karaağaç (2013: 383), Gencan (1979: 399), Hengirmen (2007: 258), and Ediskun (1988: 261–262) evaluate the suffix as a converb suffix that forms subordinate clauses expressing a sense of continuity and duration in the verb to which it is attached, thereby indicating when the predicate of the main clause began. Ergin also notes that it was used to indicate the cause of the predicate in Old Turkic. Korkmaz's comprehensive work focuses exclusively on morphology, whereas other studies also address phonology and syntax. It is also treated as a converbial suffix in Turkish grammars written in English. Göksel and Kerslake (2005: 89) consider the suffix to be one of the subordinating suffixes that exclusively form converbs. Kornfilt (1997: 104), on the other hand, classifies it as one of the suffixes that form non-finite adverbial clauses. The most unusual assessment of this suffix is offered by Yüceol Özezen. With considerable precision, the researcher argues that the suffix functions as a subject-forming element in modern Turkish and, therefore, cannot be considered a converbial suffix (2018: 82–83).

Syntax books of present day Turkish also do not parse sentences in the pattern described above. Karahan (2010), Karaörs (2005), Özkan and Sevinçli (2009) do not analyse sentences of the type discussed in this paper into their constituents. Celilov's *Mürəkkəb Cümlə Sintaksisi* (1983), a Soviet-era syntactic study of Azerbaijani written in the Cyrillic alphabet, also does not provide any analysis of this type of sentence. Although there are many books in the field of syntax, almost none of them appear to address problematic sentences.

1.2. Grammars of Historical Periods

Tekin depicts the suffix as a converbial one which forms adverbs showing intention or beginning time of verb's movement (2003: 176–177). Gabain states that, beyond its temporal and purposive functions, the suffix also forms descriptive verbs expressing purpose and ability and is used with an adjectival-participial function, as illustrated in an example. She also adds that it acquired the meaning of “since” in later periods and texts (1988: 86, 113). These adjectival-participial or verbal-noun uses, such as “buşı birgeli sakınçın” (with the idea of giving charity), “Savlar işitgeli ulug küsüşüm erdi.” (Hearing the lyrics was my greatest wish.), “bütürgeli üçün” (to complete something), and “korkıtgali üçün” (to scare someone), are also noted in Şinasi Tekin's work *Maytrısimit* (1976: 56, 58, 108, 183). Tabaklar argues that {-GAll} in two sentences of the Tunyukuk Inscription functions as a verbal noun rather than a converb, because the forms with {-GAll} essentially serve as the subjects of the sentences (2013: 272–273). Erdal is the researcher who examines the suffix in the most detailed manner. He classifies the suffix into three functions as temporal, final, and supine, and also emphasizes that the final function can shift into the supine function. The temporal one functions as “since”; the final one indicates the aim of the action referred to in the main clause; and the supine functions as the first

element in forming a descriptive compound verb. The researcher also mentions a {-GAlIr} variant used as an imminent future form (2004: 244, 317, 479, 489). Erdal seems to have noticed the subject-related problem in sentences whose subordinate clauses contain the temporal {- (y)AlI}. He notes that when no subject is explicitly stated, several interpretations are possible:

“A third possibility, when no subject is stated, is that the clause's content is meant to hold for any appropriate entity as subject; a fourth that the subject should be supplied by the addressee or reader from out of the context. Thus, when, at the beginning of a letter but after the address, we find the sentence *adrılğalı yirilğalı ärü ärü [ür] keç boltı* (HTs VII 2064) we know that we have to translate 'Bye and bye it has become a long time since (you and me) were separated and torn apart' although the converbs in -gAlI are not accompanied by any explicit reference to a subject” (Erdal 2004: 308–309).

The researcher is discussing what the subject of the subordinate clause with the {-GAlI} suffix might be, not the subject of the main clause, however in such sentences, it is also unclear what the subject of the main clause is. In English, the pronoun *it* can be used as an expletive subject, but this is not natural in Turkish. While you can say “It has been two months since I retired.” in English, you cannot say “Ben emekli olalı o iki ay oldu.” in Turkish. It could be argued that the predicate of the sentence is simply the verb *oldu*, not *iki ay oldu*; however, there is an inseparable link between *iki ay* and *oldu*. This becomes even more apparent in present continuous tense conjugations. When someone says, “İki ay oluyor.” we naturally wonder, “Ne iki ay oluyor?” and look for the argument. We must look for the argument because one is required to complete the predicate, and it is clear that the argument here is not the phrase *iki ay*. Something else is needed.

Drawing on the major grammatical sources for each historical period, Alkaya summarizes that the {- (y)AlI} suffix functioned as a converb suffix expressing temporal and purposive meanings during the Karakhanid, Khwarazmian, Kipchak, and Chagatai periods and also served as a marker of descriptive compound verbs in Karakhanid (2011: 157–158). In his detailed study, the same author contends that the suffix {-GAlI} in the sentence “Yuyka ärkli topul-ğalı uçuz ärmiş, yinçge erklig üz-gäli uçuz.” from the Tunyukuk Inscription is a verbal noun suffix and notes that the suffix functions as both a participial and verbal noun suffix in Siberian Tatar (2011: 156, 164, 171). The suffix is also attested in the {- (y)AlIdAn} form in Old Anatolian Turkish (Timurtaş 1976: 363). Salan thinks these constructions were formed through ellipsis from the particle phrase {- (y)AlI} + *günden/demden* + *beri*, and provides several compelling examples from the Old Anatolian Turkish period, such as “Nazar ideli günden ah itdüm”, “toğalı günden gerek mu‘cizâtlar görsede”, “toğalı günden berü anuñ kerameti, mu‘cizâtı iklîmlerde meşhûr olupdur”, and “Ammā Ebrehe Eşrem Mekke üzere çeri getürelî yıldan berü Seyf ‘Amdān tağına çıkmaduğ-ıdı” (2019: 64). In these examples, the suffix appears to function as a participial suffix. This suggests that, during earlier historical periods and in some modern Turkic languages, such as Siberian Tatar, the suffix {- (y)AlI} served not only as a converbial but also

as a participial and verbal noun marker. Note that these examples in historical texts differ from the sentences found in the works of K. Tahir, F. Baykurt, and Y. Kemal, as well as from constructions such as “{-(y)All} X dakika, saat, gün, ay + ol-”. In historical texts, these kinds of forms function simply as the suffixes {-mAk} and {-DIk} and do not carry the meaning of an “event operator”. In contrast, in the sentences found in the novels mentioned above and in narrative patterns like “{-(y)All} X dakika, saat, gün, ay + ol-”, the suffix {- (y)All} functions as an event operator or time anchor. This semantic concept is, of course, rooted in the converb {- (y)All}. However, in the examples from the novels, elements marked with the suffix act as subjects rather than adverbs. This indicates that the phenomenon in question is not a case of morphological subjectification but rather a syntactic process. Explaining this process requires an approach that goes beyond classical grammar, and this is where the Minimalist Program can provide valuable insight.

2. A Minimalist Approach to Address the Subject Problem in Sentences with {-(y)All}

2.1. The Functions of Minimalist Principles

Chomsky thinks that contrary to previously held beliefs, human languages are quite similar to each other and that this can be explained by certain parameters and shared linguistic features (2010: 29–45). He also believes that languages are shaped by economy, favoring the simplest possible constructions with minimal rules and complexity. He argues that there is considerable evidence suggesting that both derivations and representations are governed by a form of “least effort” condition and must be minimal in a fairly well-defined sense, with no superfluous steps in derivations and no unnecessary symbols in representations (Chomsky 2015: 147). The Minimalist Program was designed accordingly, adopting principles such as representational and derivational economy, locality, and the copy theory of traces (Chomsky 2010: 47–63). Principles such as representational and derivational economy are employed by a language not only to ensure efficiency but also to avoid uninterpretability, since such outcomes are not welcome at either the Phonetic Form (PF) or Logical Form (LF) stages (Chomsky 2015: 38, 137).

2.2. The Issue of Argument Structure and Thematic Roles

Every predicate involves a certain number of participants with which it interacts. These participants are called *arguments*, and the relationship that the predicate establishes with them is known as the *argument structure* (Carnie 2006: 48–49; Haegeman: 44). In this relationship, the subject functions as the external argument, while the object functions as the internal argument (Haegeman 1994: 72, 298). The subject generally consists of three components: a thematic-aspectual component (the thematically most prominent argument of a predicate), a morpho-syntactic component (classically identified by case and/or agreement), and a discourse-informational component (the topical or thematic entity named in a proposition) (Svenonius 2002: 1–2). Although the three components listed above are usually combined into a single noun phrase to form the subject, a noun phrase is not the only

constituent capable of satisfying these requirements. As will be argued below, an XP projected by a functional head may satisfy all three components simultaneously, occupying the subject position not by virtue of its categorial membership but by virtue of feature compatibility with the licensing head. In the sentence “Emekli olalı iki ay oldu.”, the external argument is the person's retirement, and this completes the predication.

Arguments can also be categorized into types, such as the highest argument and the lowest argument. The highest argument is typically realized as the morphosyntactic subject; however, there are also cases in which the morphosyntactic subject is not the highest argument. For instance, research on adjuncts shows that in German, some verbs take non-subjects as their structurally highest argument, and the preverbal use of such an adjunct assigns a property to the subject rather than merely characterizing the process (Frey 2003: 174, 190). This observation is relevant to the present analysis insofar as it demonstrates that the correspondence between structural prominence and morphosyntactic subjecthood is not absolute, and that elements not canonically categorized as subjects may nonetheless occupy structurally prominent positions under appropriate syntactic conditions.

The semantic aspect of the relationship that arguments establish with a predicate is called a *thematic role*. Some common thematic roles include agent, patient, theme, experiencer, beneficiary, and goal, among others (Carnie 2006: 219–220; Haegeman 1994: 49–50). These thematic roles are theoretical constructs, and there is no consensus on either their exact number or their precise classification. Patient and theme are often treated as a single thematic role, although some sources distinguish between them (Haegeman 1994: 49–50). The patient/theme is typically defined as the participant that undergoes an action or is moved, experienced, expressed, or perceived. In the sentence “Emekli olalı iki ay oldu.”, *emekli olalı* is the affected entity and assumes the role of theme, since the topic of the sentence is the person's retirement. The same situation obtains in Kemal Tahir's sentence: *vuruşalı* is the element affected by the action expressed by the verb *doldurmamıştı* and is likewise the theme of that predication.

It may also be proposed that clauses formed with the suffix {-(y)All} function as morphosyntactic subjects. Although it is commonly assumed that converbs in Turkish do not undergo inflection, there are instances in which converbs take case suffixes, as in “gelineye kadar” (until he/she arrives). Just as the clause “Ben geldim.” is in the accusative case in ““Ben geldim.’ dedi.” and in the nominative case in ““Ben geldim.’ dendi.”, it can similarly be assumed that clauses bearing the {-(y)All} suffix take the nominative case as a whole. Furthermore, adverbs, and time expressions in particular, appear in the nominative case (Erdal 2004: 365; Kalkan 2006: 36–37), and converbs are essentially adverbs serving a temporary function. The assumption that converbs fall entirely outside the case system therefore warrants reexamination, at least at the syntactic level. Under the BPS framework developed in section 2.5, the {-(y)All} suffix is analyzed as a functional head that projects an XP; this XP is subsequently merged into the specifier of the relevant functional projection via Move, satisfying both

the EPP requirement and the condition of full interpretability at LF. The morphosyntactic subject status of {-(y)All}-marked clauses is therefore not the product of morphological nominalization but a positional property arising from feature valuation between the XP and the licensing functional head.

2.3. Interrogative Forms

The subject function of the {-(y)All} elements is clearly evident in interrogative sentences and their corresponding answers. For example, the interrogative sentence “Ne beş dakika oldu?”¹ can be viewed as a copy of the declarative sentence “Gideli beş dakika oldu.”. In this process, the interrogative pronoun becomes the subject of the question sentence and refers back to *gideli* in the corresponding declarative structure. The question modal can also be applied to the sentence above as “Körpe savaşçılar saatlerden beri dövüşüyorlarmış duygusuna kapıldıkları hâlde ne iki dakikayı doldurmamıştı?”. In the interrogatives, the interrogative pronoun functions as the subject and takes the place of the subject in the declarative sentence, regardless of whether that subject is expletive or contentive. Another point to consider is that we are obliged to ask the question “Ne?”. Questions such as “Ne zamandır?” (Since when?) or “Ne zamandan beri?” (How long ago?) cannot be asked. Because predication necessarily requires a subject in order to be complete, the question “Ne?” must be posed, yielding the answer *gideli*. This obligation might be interpreted as evidence for the EPP requirement in Turkish, even though it is a null-subject language.

2.4. Functional Heads

Functional heads can be described as minimal syntactic heads that correspond to functional categories (e.g., Tense, Agreement, Determiner, Complementizer) and serve to structure grammatical relations rather than carry lexical meaning. Affixes, particles, auxiliaries, adverbs, and certain suffixes can function as functional heads (Cinque 1999: 52–58, 2006: 3). At this point, dependent morphemes, especially inflectional suffixes, can be seen as functional heads. Another feature of functional heads is that they are assumed to bear features that participate in both inflectional and derivational morphology (Rizzi & Cinque, 2016: 140). Because some forms that function as participles and gerunds in Turkish are used as mood suffixes in other Turkic languages (Yener 2017: 1255, 1258), Turkish non-finite suffixes can be understood as exhibiting a phenomenon at the interface between structural and inflectional morphology. In this respect, they provide a clear illustration of a functional head. Functional heads, much like contentive heads, give rise to fully fledged phrasal projections and, when endowed with appropriate morphosyntactic features, trigger syntactic movement as well as other major syntactic operations (Rizzi & Cinque 2016: 141). We learn that non-finite suffixes are added to sentences rather than to words, and that they assign a role to the sentence to which they are attached (Yener 2017: 1263). Since it is added to phrases and transforms them into adjectival, adverbial, and nominal structures or adjunct phrases, and governs them within the sentence, the suffix {-(y)All} can

¹ These sentences cannot be translated precisely into English. If a question were to be formed in English, it could be ‘How long has it been?’, which targets the temporal element expressed in the verb.

also be considered a functional head that projects an XP capable of being merged into subject position under appropriate syntactic conditions.

2.5. Bare Phrase Structure Theory and Representational Economy

There is a consensus that the element functioning as the subject position must be projected as a noun phrase (NP) (Akmajian et al. 1997: 167; Chomsky 2015: 161; Svenonius 2002: 2). This requirement, as will be argued below, is not a categorial stipulation but an interface condition that the derivation must satisfy for convergence.

A principled account of this requirement was first offered within X-bar Theory, which provided a uniform schema for phrase structure across all syntactic categories. Under this framework, NPs, VPs, CPs, and PPs share the same underlying representational template and can be used interchangeably, subject to certain constraints (Akmajian et al. 1997: 201–202). The notion of NP must, however, be understood in its broadest sense, encompassing not only canonical nominal constructions in the traditional grammatical sense but also phrases projected by verbal elements, what are conventionally termed nominalizations or verbal nouns (Sebzecioğlu 2016: 372–373). A CP may therefore instantiate an XP node, and this XP may be interpreted as an NP. It follows that an XP can occupy the subject (specifier) position without being a full NP in the categorial sense; identification as an XP is sufficient. Carnie formalizes this generalization as:

$XP \rightarrow (YP) X'$ (Carnie 2006: 169–171)

This schema generates, among others, the configuration $X' \rightarrow X (ZP)$, capturing the recursive and category-neutral character of phrase structure. Crucially, X-bar Theory extends beyond lexical categories to functional heads as well. If we apply this specifically to the functional head instantiated by the {-(y)All} suffix, the resulting structure can be formulated as:

$XP (-All) \rightarrow (Spec) X'$
 $X' \rightarrow X^0 (-All) VP$

Here, $X^0 (-All)$ is the functional head bearing the suffix's feature bundle, VP is its complement, and the Spec position hosts the external argument.

However, X-bar Theory represents an earlier stage in the development of generative grammar, and its stipulated schemas, particularly the intermediate X' projection, came to be viewed as representationally redundant. The transition from Government and Binding theory to the Minimalist Program brought with it a fundamental reconceptualization of phrase structure under the principle of representational economy: the grammar should introduce no structural primitives beyond those strictly required for the derivation to converge at the phonological interface (PF) and the Logical Form interface (LF) (Chomsky 2015: 171). X-bar schemas, being externally imposed templates rather than emergent properties of the computation, were incompatible with this economy requirement.

This led to the replacement of X-bar Theory by Bare Phrase Structure (BPS) (Chomsky 2015: 222–229), in which phrases are not defined by pre-specified schemas but are constituted dynamically through the operation of Merge. Under BPS, every syntactic object is defined relationally: a lexical item that has not yet been selected by a higher head is a minimal projection, while a syntactic object that is not a complement to anything is a maximal projection. No intermediate projection, the X' of the earlier schema, is posited, since it plays no role at either interface and is therefore ruled out by representational economy. The structure that X-bar Theory described with the schema $X' \rightarrow X^0 (-All)$ VP now emerges simply from the Merge of $F^0 (-All)$ with VP, and the earlier $XP \rightarrow (Spec) X'$ corresponds to the external Merge of the subject argument into the edge of the functional projection:

[FP Spec [$F^0 (-All)$ VP]]

What licenses the subject position in this framework is not a categorial label but feature valuation: the uninterpretable nominal or D-feature of F^0 must be valued against the feature matrix of the merged specifier for the derivation to converge. This renders categorial distinctions permeable, as a CP, for instance, may merge into a position canonically associated with an NP, provided feature compatibility is satisfied, without any additional representational cost. Representational economy is thus not an additional constraint imposed on the grammar but an emergent property of a derivational system in which structure is built exclusively by Merge and all formal features must be valued at the interfaces.

Returning to the $\{- (y)All\}$ suffix, the NP status attributed to phrases bearing this suffix need not be the product of morphological nominalization. On the contrary, representational economy disfavors any derivational step not required for convergence. If the interface can interpret the relevant phrase as nominal on the basis of feature valuation alone, without an overt category-changing operation, then the more economical derivation is preferred. The NP status of $\{- (y)All\}$ -suffixed elements is therefore best analyzed as positional, arising from the feature requirements of the functional head that licenses the subject position, and not from any morphological process internal to the phrase itself. To illustrate this positional analysis, the following tree diagrams represent the relevant sentences:

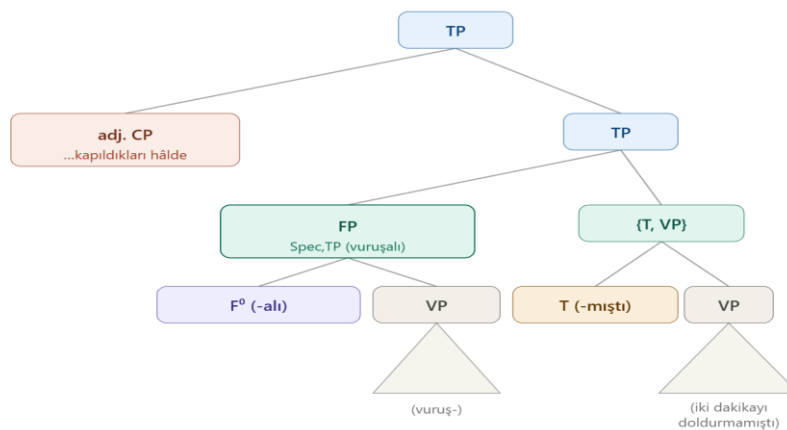


Figure 1. Tree diagram of the sentence in Kemal Tahir's novel.

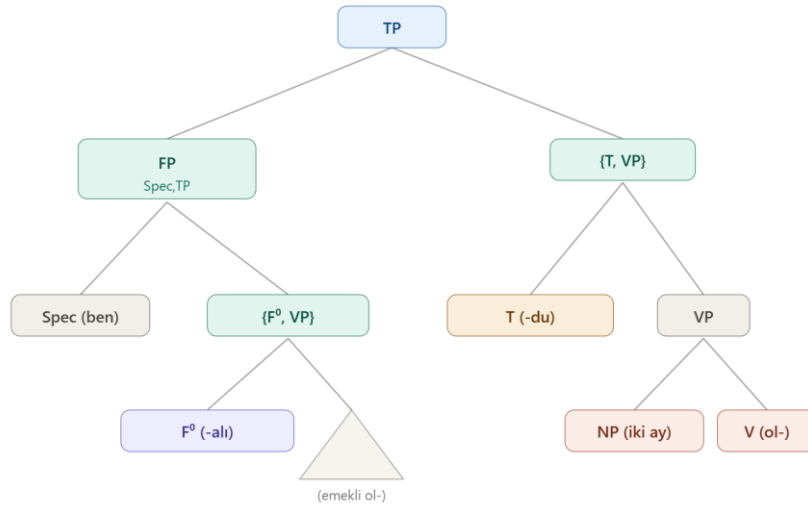


Figure 2. Tree diagram of the sentence “Ben emekli olalı iki ay oldu.”.

2.6. The Extended Projection Principle

The Extended Projection Principle (EPP) is a principle within the Minimalist Program that requires every sentence to have a subject (specifier). This subject may be realized as an overt noun phrase, a pronoun, or a person marker encoded in verbal morphology (Chomsky 2015: 49, 59). If principles and parameters are universal, they must also apply to Turkish. It has been shown that XPs can occupy the subject position in order to satisfy the EPP (Alexiadou & Anagnostopoulou 1999: 93). It therefore seems reasonable to assume that, in order to repair the discordant configuration involving the pronoun *o* in sentences like “Ben emekli olalı **o* iki ay oldu.”, the phrases bearing the {- (y)All} suffix, which functions as a functional head and governs the clause, move to the subject position as an XP to satisfy the EPP, rather than retaining the pronoun *o* as the subject. This move would also ensure interpretability at the LF stage, because the configuration with the pronoun *o* is uninterpretable.

Some researchers assume that EPP may not be universal, because it does not apply to null-subject languages; instead, these languages satisfy the subject requirement through verb raising (Biberauer 2008: 4, 8; Tsiakmakis & Espinal 2022: 6). Turkish is a null-subject language (Çınar 2024: 333). However, verb raising alone is insufficient in Turkish, because verbal conjugation does not always identify the subject. In the sentence “Körpe savaşçılar saatlerden beri dövüşüyorlarmış duygusuna kapıldıkları hâlde vuruşalı iki dakikayı doldurmamıştı.”, the verb *doldurmamıştı*, conjugated in the third person singular, provides no information about the subject. This requires us to identify the subject through a visible element in the sentence. As explained in the interrogative forms section, this is particularly evident in interrogative sentences. Except for necessitative sentences expressing advice, such as “Kışa odun toplamalı.” (We need to gather firewood for the winter.) and passive constructions in which intransitive verbs are passivized, such as “Ankara’ya salı sabahı ulaşıldı.”, (Ankara was reached on Tuesday morning.) all sentences in Turkish have either an active or a passive subject

(Ergin 2009: 399; Karahan 2010: 20–21; Özkan & Sevinçli 2009: 110). It may be assumed that these sentence structures are secondary rather than primary. The necessitative mood has relatively recently acquired an advisory meaning, in which the subject's thematic role is weakened. Furthermore, whether a verb is intransitive or transitive can vary across historical periods and therefore cannot be considered a primary characteristic. Some verbs that are intransitive today were transitive in earlier stages of the language. For example, the verb *başla-* “to begin” is used transitively in *Kutadgu Bilig*, as “Bayat atı birle sözüğ başladım.” In present-day Turkish, it is intransitive. Then, a sentence like the one above would require either an expletive or a contentive subject, since its predicate is neither in the necessitative mood nor a passive construction with an intransitive verb. *Vuruşalı* fulfills this requirement.

2.7. Relativized Minimality

Relativized minimality is a principle of locality that limits the search for local relationships to the closest potential bearer of that relationship (Chomsky 2010: 58). Within the framework of Bare Phrase Structure, where bar-levels are eliminated and syntactic structure is defined purely in relational terms, this proximity condition is not an external constraint imposed on derivations but a property internal to the representation itself. Representational economy, as a principle of the Minimalist Program, requires that syntactic representations be as simple and uniform as possible; redundant or uninterpretable elements are excluded from well-formed structures. Relativized Minimality thus operates within this domain, governing which element the functional head can enter into a local Merge relation with, based solely on structural geometry. According to the Minimalist Program, every linguistic expression must be interpretable at both PF and LF, as mandated by the principle of full interpretation. Expressions that cannot be interpreted are eliminated before reaching PF and LF (Chomsky 2010: 49, 2015: 18). Let us assume, for the sake of argument, that the EPP is not a universal principle, or that Turkish does not require it at all. If the person conjugation of the verb had been taken into account, the sentences under examination should have included the subject pronoun *o* as in “Körpe savaşçılar saatlerden beri dövüşüyorlarmış duygusuna kapıldıkları hâlde vuruşalı *o** iki dakikayı doldurmamıştı.” and “Ben emekli olalı *o** iki ay oldu.”. These types of sentences exhibit a broken configuration and cannot be interpreted in LF. This flawed and incompatible configuration may stem from attempts to transfer perfect-tense structures from Indo-European languages into Turkish; naturally, such constructions may not initially suit the language. To solve the problem, Turkish, by employing the principle of relativized minimality, may have sought the closest potential bearer of the subject position, and the words *vuruşalı* and *emekli olalı* may have taken over the subject position because they are closest to this pronoun. Even though they are technically converbs, the functional head role of the {- (y)All} suffix and the XP movement of the structure it forms facilitate the assumption of the subject position by structures bearing the {- (y)All} suffix. A sentence that can be interpreted in LF would also satisfy the EPP, since it contains a subject.

2.8. Derivational Economy

All these scenarios are basically based on the presence of an *o* pronoun in sentences which can be reconstructed as “Ben emekli olalı **o* iki ay oldu.”. It may never have existed. A native speaker might argue that the structure is ungrammatical, despite being required by person agreement on the verb. Derivational economy is a principle of the Minimalist Program that seeks to eliminate uninterpretable features through mechanisms such as rich verb conjugation and the movement of elements. According to Chomsky, this principle accounts for economy by treating movement as a last-resort operation, invoked only when no other means are available to satisfy grammatical requirements (Chomsky 2010: 49, 2015: 24). As mentioned in the introduction and the Relativized Minimality sections, it may be predicted that sentence structures such as “Ben emekli olalı iki ay oldu.” and “Gideli beş dakika oldu.” emerged in Turkic as a result of translation efforts modeled on constructions like “It has been two months since I retired.” and “It has been five minutes since (s)he/I left.” particularly given the absence of perfect tense constructions in Turkic. At this point, it can be likened to compound sentences formed with the conjunction *ki*. It is known that, prior to Islam, Turkic peoples adopted religions such as Manichaeism, Buddhism, and Nestorian Christianity during the Uyghur era, which gave rise to a major translation movement focused on rendering religious texts from Sanskrit, Tocharian, and Sogdian (Ercilasun 2004: 224–263). All of these are Indo-European languages. Indo-European languages inherently include a perfect tense as part of their grammatical system (Crellin & Jügel 2020). There are also numerous translations of Buddhist texts from Chinese (Ercilasun 248, 251). Chinese encodes the perfective aspect through grammatical markers (Klein et al. 2000: 723–724). Perhaps Turkic, when faced with an abundance of perfect tense structures in translation, sought an internal equivalent and, through analogical leveling based on the already existing verbal noun and participle functions of the {-GAll} suffix, quickly positioned the structures bearing the suffix before the predicate through a last-resort Move operation, thereby giving rise to a clausal subject. The pre-existing uses of {-GAll} in verbal noun and especially participial functions appear to have established a threshold for its new role, albeit as a quasi-verbal noun or an event-denoting clausal subject. Placing this element before the verb may have resolved the issue of uninterpretability.

CONCLUSION

It is observed that phrases or clauses bearing the {-(y)All} suffix assume the role of the subject in Turkish when syntactic conditions require it. This development can be accounted for through two complementary mechanisms rooted in economy principles. The first mechanism operates through representational economy and the operation of Merge. Multiple translation waves introduced the redundant use of *o* to reflect verbal agreement. The resulting structure is uninterpretable at LF. Within the framework of Bare Phrase Structure, where bar-levels are eliminated and structure is defined

purely relationally, Relativized Minimality functions not as a constraint on movement but as a structural proximity condition internal to the representation itself: it determines which element, by virtue of its geometric closeness, can enter into a local Merge relation with the functional head governing the subject position. Under this account, Turkish resolved the uninterpretable configuration by allowing Relativized Minimality to identify the {-(y)AlI}-marked XP as the closest potential bearer of the subject position. This XP was then merged into the specifier of the relevant functional projection, satisfying the subject requirement without any morphological nominalization. The operation is representational in nature, driven by the geometry of the structure, and what licenses it is a functional head, with XP Merge as the operative force.

The second mechanism operates through derivational economy and the operation of Move. Intensified translation activity, particularly during the Uyghur and Karakhanid periods when large-scale religious translation movements brought Turkish into sustained contact with Indo-European and perfective-aspect-marking languages, generated a functional demand that the existing grammatical inventory of Turkish had to satisfy efficiently. Rather than introducing novel morphological material, Turkish recruited the existing {-(y)AlI} suffix and extended its functional range through a derivational process: the suffix, already associated with participial and verbal noun functions, acquired clausal subject function through analogical leveling, a move-driven redeployment of its feature set into a new structural domain. Derivational economy dictates that linguistic needs be met through the most cost-efficient means available; here, the pre-existing functional threshold established by the suffix's participial and verbal noun uses made this extension structurally available at minimal cost. The subject function of {-(y)AlI} is therefore not a direct historical continuation of these prior uses, but a new function derived from them through this economy-driven analogical process.

Both mechanisms reflect the same underlying logic. The representational pressure created by uninterpretable configurations, resolved through Bare-Phrase-Structure-internal Relativized Minimality and XP Merge, and the derivational pressure created by translational need, resolved through analogical extension and feature redeployment, are complementary responses to the same historical contact situation. Together, they instantiate the economy-driven principles that form the generative basis of the Minimalist Program.

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