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SYNCOPE THROUGH GEMINATION IN TURKISH: EXPLORING THE ROLE OF SUFFICIENTLY IDENTICAL FLANKING CONSONANTS[*]

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Abstract

This paper investigates the interplay of syncope and gemination in modern Standard Turkish, underlining the crucial function of sufficiently identical flanking consonants (SIFCs) in this process. Syncope, typified by the elimination of a vowel within specific phonological contexts, holds the potential to give rise to gemination. A thorough analysis of varied spoken language data uncovers the conditions that govern syncope, countering prevalent literature which postulates syncope as a lexical process; instead, our findings suggest it to be phonological in nature. Attention is then directed towards syncope-induced gemination, emphasizing the catalytic role of SIFCs. This focus further underscores the indispensable role that SIFCs perform in facilitating this complex process. Moreover, the unique interplay between syncope and the potential for gemination is systematically explored, disclosing intricate patterns of consonant interaction within the Turkish language. The findings suggest that Turkish phonology exhibits a compelling alignment with gemination language characteristics, yielding thought-provoking insights into phonological processes such as vowel deletion and consonant gemination. The results of this novel research initiative contribute significantly to the expanding body of studies on syncope and gemination, shedding light on the intricate interplay between the two in Turkish, while also providing insights for the examination of analogous phenomena in other languages.

Keywords: *syncope, gemination, sufficiently identical flanking consonants, Turkish.*

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TÜRKÇEDE İKİZLEŞME KAYNAKLI ORTA ÜNLÜ DÜŞMESİ: YETERİNCE ÖZDEŞ ÇEVRE ÜNSÜZLERİN SÜREÇTEKİ YERİNİN TESPİTİ

Öz

Bu makalede, çağdaş Ölçünlü Türkçedeki orta ünlü düşmesi ve ikizleşme etkileşimi tetkik edilerek yeterince özdeş çevre ünsüzlerin (YÖÇÜ) süreçteki mühim işlevi dikkatlere sunulmuştur. Muayyen ses bilimsel bağlamlarda bir ünlünün silinmesini ifade eden orta ünlü düşmesi, bazı durumlarda ünsüz ikizleşmesine yol açabilmektedir. Muhtelif konuşma dili verilerinin kapsamlı bir tahlili neticesinde orta ünlü düşmesini yöneten koşulların tespit edilmesiyle sürecin sözlükselliğini ikrar eden alanyazındaki genel kabulün aksine orta ünlü düşmesinin ses bilimsel bir olgu olduğu gösterilmiştir. Daha sonra, orta ünlü düşmesi kaynaklı ikizleşmeye yol açan koşullar nizami bir şekilde incelenmiş ve YÖÇÜ'lerin süreçteki katalizör etkisi gözler önüne serilerek bu karmaşık süreçteki vazgeçilmez yeri vurgulanmıştır. Dahası, orta ünlü düşmesi ile muhtemel ikizleşmeler arasındaki benzersiz ilişkinin incelenmesiyle Türkçedeki ünsüz örüntüleri değerlendirmeye dahil edilmiştir. Bu çalışmanın bulguları, ünlü silinmesi ve ünsüz ikizleşmesi gibi ses bilimsel süreçlere dair düşündürücü içgörüler sunarken Türkçenin ses biliminin ikizleşmeye meyyal dillerle uyumlu vasıfları haiz olduğunu ortaya koymaktadır. Bu yenilikçi çalışmanın sonuçları, orta ünlü düşmesi ve ikizleşme üzerine yapılan çalışmaların giderek genişleyen hacmini daha da zenginleştirmektedir. Türkçedeki orta ünlü düşmesi ve çevre ünsüzlerle etkileşimlerine ışık tutmaya çalışılan bu araştırmanın diğer dillerdeki muadil olguların incelenmesi için de katkı sunacağı ümit edilmektedir.

Anahtar Sözcükler: *orta ünlü düşmesi, ikizleşme, yeterince özdeş çevre ünsüzler, Türkçe.*

1. Introduction

Syncope, defined as the omission of a vowel in specific contexts (Crystal, 2008: 469), and gemination, the sequence of identical adjacent consonants in particular situations (Crystal, 2008: 206), are pervasive phonological phenomena across a wide array of languages. Known instances include characteristic syncope in languages such as Spanish (Harris, 1983) and the prevalent geminate consonants in Italian (Loporcaro, 2015). These processes significantly influence the phonotactic patterns of words and the overarching phonological system of a language (Kenstowicz, 1994).

In some cases, syncope can trigger gemination, resulting in the formation of consonant clusters possessing identical or remarkably similar attributes (Steriade, 1988: 94-96). This intriguing interaction between gemination and syncope has captivated the curiosity of many scholars, motivating attempts to decode the underlying principles and conditions governing these phenomena.

This study ventures into the complexities of syncope-induced gemination in modern Standard Turkish, with special emphasis on the pivotal role of sufficiently identical flanking consonants (henceforth SIFC). The objective, underpinned by new data, is to propose a counter-argument to the prevailing assumption that syncope in Turkish is primarily lexically driven. Instead, this study suggests that syncope is instigated by specific phenomena, thereby positioning it as a phonologically conditioned event. In articulating these phonological conditions, the main discussion will revolve around cases where syncope is unexpectedly observed due to potential geminate clusters. In doing this, the mechanisms of syncope that stem from gemination will be comprehensively decoded.

The forthcoming sections will illuminate the intersection of gemination and syncope in Turkish. Section 2 provides the background on syncope, while Section 3 investigates the intricate interplay between syncope and consonant interactions. Section 4 examines the catalytic role of SIFCs in syncope, and Section 5 concludes the study with a synthesis of the findings and insights.

2. The Phenomenon of Syncope: A Broad Overview

The extent to which syncope is optional or obligatory varies among languages. For example, German exemplifies optional syncope, whereas Czech exhibits obligatory syncope (Scheer, 2004: 9). Scholarly consensus has traditionally held that syncope in Turkish was obligatory for certain forms and absent in others. However, the data gleaned from spoken language and TV recordings used in this study compellingly suggests that syncope in Turkish is both a predictable outcome of the phonological structure and an optional process. Furthermore, the actualization of syncope is contingent upon conditions related to the characteristics of the alternating vowels and the flanking consonants. These conditions demonstrate systematicity, thus rendering syncope predictable.

While dictionaries present a limited number of words undergoing syncope (Redhouse, 2000; Türk Dil Kurumu, 2011), recent data from spoken language suggest that this phenomenon is more prevalent. Regardless of the speed of speech, at least some speakers of modern Standard Turkish may omit certain segments, suggesting a non-random and stable characteristic of this phonological process. The depiction of syncope according to the existing literature, along with the introduction of new data, is presented in the subsections below.

2.1 Syncope in natural languages

Syncope is a ubiquitous phenomenon, attested in a multitude of typologically unrelated languages, with various theoretical explanations postulated for its occurrence. As discussed by Scheer (2004), despite the variability in syncope's optional or obligatory nature across languages, its phonotactics remain stable (Scheer, 2004: 9). Most languages necessitate a VCvCV environment for syncope (where the lowercase 'v' symbolizes the position for syncope). Scheer (2004) provides the following cross-linguistic examples:

(1)	Moroccan Arabic	*kɨtøb-u* (write Pf. 3. Pl.)	*køtɨb* (write 3. Sg.)	*kɨttɨb* (write 3. Sg. Cau.)
	German	*innør-e* (inner-Infl.)	*inner* (inner)	*inner-lich* (internal)
	Tangale	*dobø-go* (called)	*dobe* (call)	*dobu-n-go* (called me)
	Somali	*nirøg-o* (female camel-Pl.)	*nirig* (female camel-Indef.)	*nirig-ta* (female camel-Def.)
	Turkish	*devør-i* (transfer-Acc.)	*devir* (transfer-Nom.)	*devir-den* (transfer-Abl.)
	Czech	*lokøt-e* (elbow-Gen.(Sg.))	*loket* (elbow-Nom.(Sg.))	*loket-ní* (elbow-Adj.)
	Hungarian	*majøm-on* (monkey-Sup.)	*majom* (monkey-Nom.)	*majom-ra* (monkey-Sub.)
	Hindi	*kaarøk-õõ* (case-(Obl.(Pl.))	*kaarək* (case-Nom.(Sg.))	*kaarək-nee* (case-Agentive)
	Kolami	*kinøk-atun* (break-Present)	*kinik* (break-Imp.)	*kinik-tan* (break-Past)

(Scheer, 2004: 9)

In the array of nine languages illustrated in (1), including but not limited to Turkish, all the left-most forms exhibit the VCvCV pattern, hence making them prone to syncope. Syncope does not occur in the other two forms due to the lack of a subsequent vowel at the syncope site. For instance, in the Turkish words *devir* "transfer" and *devirden* "from the transfer", there is no VCvCV pair in the needed place.

Apart from the pattern, the nature of the alternating vowel significantly influences the occurrence of syncope. While some languages restrict syncope to the schwa, others allow only high vowels to undergo this process. However, certain languages permit any vowel to experience syncope. Despite these variations, a general consensus agrees that high vowels are universally preferred for syncope (Gouskova, 2003: 228-236; Howe & Pulleyblank, 2004: 7-19). Some languages prefer to delete high

vowels when feasible, while others may also remove non-high vowels. Yet, the scenario where non-high vowels can be deleted but high ones cannot remains unattested (Gouskova, 2003: 82). Additionally, most languages predominantly permit only the deletion of unstressed vowels. However, based on the properties of the surrounding consonants, some languages might also accommodate the deletion of stressed vowels (Blust, 2001: 145-149).

2.2 Literature perspective on Turkish syncope

This subsection provides a concise examination of syncope in Turkish. Although syncope is a well-documented linguistic phenomenon, the data currently describing the process may be inadequate, a topic which will be expanded upon in the subsequent section. This subsection aims to encapsulate the prevalent approach to this subject.

Numerous researchers contend that synchronic changes relating to Turkish syncope are random and lexical (Ediskun, 1963: 87-88; Ergin, 1962: 54; Gencan, 1979: 41; Lewis, 1967: 10; Swift, 1962: 33). A considerable number perceive this alternation as vowel deletion, while a minority view it as vowel insertion (Kornfilt, 1986; Lees, 1961; Özsoy 2004). Due to the limited and repetitive data, primarily sourced from orthography, proposing any phonological or morphological condition for the phenomenon poses a challenge. A trend has been observed, originating with Deny (1955) and reaching its zenith with Foster (1969: 223), of attributing a semantic connection to words undergoing syncope. Words pertaining to body parts have consistently been assessed as syncope sources by all researchers. However, as Foster (1969) himself acknowledges, many other alternating words are unrelated to body parts[1] (Foster, 1969: 224).

The contemporary consensus in linguistic studies aligns on two central points:

(2) (i) Syncope is an obligatory process.
(ii) The words that undergo syncope are lexically determined.

The following examples, where the asterisks are not mine, serve to illustrate these principles:

(3) *koyun-u → koynu,*koyunu* 'the bosom (Acc.)'
(bosom-Acc.)

*koyun-u → koyunu,*koynu* 'the sheep (Acc.)'
(sheep-Acc.)

In the former example, the word *koyun* "bosom," able and obligated to undergo lexical syncope, renders the form *koyunu* "the bosom (Acc.)" ungrammatical. In the latter example, however, the

[1] Additionally, Yavaş (1980) illustrates that not all words for body parts are acknowledged to undergo syncope in dictionaries (204).

phonetically identical word *koyun* "sheep" is unable to undergo lexical syncope, thereby deeming the form *koynu* "the sheep (Acc.)" ungrammatical.

Despite the broad acceptance of these two principles, disagreements arise over their scope. First, although syncope is proclaimed an obligatory process, researchers such as Deny (1955: 129) and Banguoğlu (1959: 114) observe that optional forms may also be grammatical within certain contexts:

(4) *burun-a → burna, buruna* 'to the nose'
(nose-Dat.)

In (4), even though the word *burun* "nose" is lexically marked for syncope, some individuals do not deem forms like *buruna* "to the nose" as ungrammatical. This reflects a century-old observation that syncope is widespread and optional in spoken language. Nevertheless, neither Deny (1955) nor Banguoğlu (1959) endeavored to describe the phonological environment where syncope occurs, and unfortunately, subsequent scholars did not reference such data.

Secondly, a definitive list of words required to undergo syncope is yet to be established. While there is general agreement on frequently used words like *burun* "nose" that have to lexically undergo syncope, disagreements surface concerning less common words like *nakit* "cash":

(5) *nakit-e → nakde, nakide* 'to the cash'
(cash-Dat.)

One of the two forms in (5) is regarded ungrammatical, based on whether or not the word is viewed as lexically alternating. If *nakit* is accepted as such, the form *nakide* "to the cash" is deemed ungrammatical and vice versa. The relative infrequency of such words appears to be the source of disagreement. Different grammars and dictionaries propose differing lists of alternating words. Despite these inconsistencies, two commonalities emerge in cases that are accepted to undergo syncope:

(6) (i) Only certain lexical forms with the VCvCV pattern can undergo syncope.
(ii) Only unstressed high vowels can and must be deleted in the syncope site of a word.

Although syncope is regarded as a lexical process in the literature, there are actually some conditions for it to be observed. In summary, while traditional grammars uphold the accuracy of the statements in (2) and (6), the upcoming subsection will probe why these may not be universally applicable to all speakers of modern Standard Turkish.

2.3 Turkish syncope according to the new data

In this subsection, I briefly discuss what the new data tell us about syncope in Turkish. As outlined in the previous subsection, the traditional grammars determine the grammatical correctness of one of the two possible forms of a word based on whether or not the word can undergo syncope lexically. The new data, however, suggest that the statements (2i) and (2ii) about Turkish syncope may not apply

universally to all speakers of modern Standard Turkish. This observation stems from the analysis of naturally occurring spoken data, where the variability and optionality of syncope are evident. Consider the following:

(7) *koyun-u → koynu, koyunu* 'the bosom (Acc.)'
(bosom-Acc.)

koyun-u → koynu, koyunu 'the sheep (Acc.)'
(sheep-Acc.)

This groundbreaking data suggests that the accusative form, which fulfills all the prerequisites for syncope, may materialize with or without a vowel, contingent on various influencing factors. The distinction between the former and latter words is due to the prevalence of their forms. The alternated form *koynu* "the bosom (Acc.)" is the common form for the former case whereas it is the non-alternated form *koyunu* "the sheep (Acc.)" which is more frequent for the latter. However, the less frequent forms *koyunu* "the bosom (Acc.)" and *koynu* "the sheep (Acc.)" are also attested. The frequency of the forms will not be discussed further, as it exceeds the scope of this paper. There might, however, be a difference between high-frequency words and lower-frequency words with respect to syncope. Hooper (1976) asserts that vowel change is a function of frequency. In English, for example, high-frequency words like "mem[o]ry" undergo syncope more readily than lower-frequency words like "mamm[o]ry". A similar phenomenon seems to apply in Turkish as well.

The finding that all forms in (7) are attested demonstrates that syncope, contrary to prior belief, is not a mandatory process. It appears to be optional for certain speakers, with some phonological contexts being more conducive to syncope than others. Hence, in light of the groundbreaking data, the prevalent assertions in the literature given in (2) can be revised as follows:

(8) (i) Syncope operates as an optional process.
(ii) The instances of words undergoing syncope are phonologically determined.

Asserting the absence of lexical conditions on syncope essentially acknowledges the presence of countless words that conform to the prerequisites for syncope and can thus undergo the process. One of the goals of this study is to delineate the conditions that permit syncope to occur. Although syncope is regarded as lexical in the literature, there are still certain commonalities detected, which were given in (6). Our new data updates these observations.

Firstly, in contrast to (6i), restrictions exist on the nature of the clusters that precede the syncope site. When the pattern may deviate from VCvCV, syncope is still feasible. Consider the examples below:

(9) *Ersin-i → Ersni* 'name of a man (Acc.)'
(name of a man-Acc.)

*Esrin-i → *Esrni* 'name of a woman (Acc.)'
(name of a woman-Acc.)

In the former instance, the pattern CCvCV surprisingly accommodates syncope for some speakers, while in the latter, its application is entirely unfeasible, aligning with (6i). This critical discrepancy can be explicated by the characteristics of the preceding consonant clusters. Notably, it appears far from coincidental that the clusters tolerating syncope predominantly align with those permissible at the ends of words in Turkish. Then, the commonalities observed in the literature in (6) can be revised as follows:

(10) (i) Forms exhibiting a VCvCV pattern may undergo syncope only if 'v' is an unstressed high vowel.
(ii) Forms exhibiting a CCvCV pattern may undergo syncope only if 'v' is an unstressed high vowel and the preceding consonants are capable of forming a possible cluster.

Secondly, it is observed that certain word forms, where the syncope site contains either a stressed or non-high vowel, can undergo syncope due to the inherent tendency in Turkish to form geminates, or identical sequential consonants. If the consonants bordering the vowel are sufficiently identical to form a geminate, these otherwise ineligible vowels can also be omitted without the need for any additional constraints. This phenomenon is evident in the transition from *geleli* to *gelli* "since coming" where a non-high vowel is deleted and from *on-ún-um* to *ónnum* "I belong to him/her" where a stressed vowel is deleted. Nevertheless, a revision to statement (10) will be necessitated following a more detailed discussion of this topic in Section 4. Prior to that, the relationship between syncope and gemination will be explored in greater depth in the forthcoming section.

3. Interactions at the Syncope Site: Gemination and Sufficiently Identical Flanking Consonants

This section explains the interplay of gemination and sufficiently identical flanking consonants (SIFCs) at the syncope site. Subsection 3.1 takes an in-depth look into antigemination, as initially proposed by McCarthy (1986), who asserts that syncope universally avoids forming geminate clusters. However, this antigemination principle has been challenged by other scholars, an issue which this paper will explore. In Subsection 3.2, we address the concept of "sufficiently identical" as proposed by Odden (1988) and its relevance in determining the precise nature of the flanking consonants involved in syncope. Throughout this section, the discussion draws on linguistic evidence from various languages to give a background for the Turkish phonological phenomena associated with syncope, SIFCs, and gemination.

3.1 Gemination vs. antigemination

The data presented by McCarthy (1986) suggest that cross-linguistically, syncope is deterred from forming geminate clusters. McCarthy (1986) introduces the term "antigemination" to describe the constraint that prevents the syncope process due to the presence of identical flanking consonants. According to his argument, a vowel's existence is dictated by the necessity to avoid identical flanking

consonants. This phenomenon is corroborated by an extensive range of data from various languages, underscoring the universality of antigemination as a constraint. The following example from the East Cushitic language, Afar, further illustrates this point among numerous others:

(11)	(a)	*ʔagara → ʔagr-i*	'scabies'
		xamil-i → xaml-i	'swamp grass'
	(b)	*gonan-a → *gonna*	'He searched for'
		*xarar-e → *xarare*	'He burned' (McCarthy, 1986: 220-221)

In the context of (11a), syncope can be realized, but it is not feasible in (11b). The identity of the flanking consonants inhibits the syncope process, aligning with the antigemination constraint.

McCarthy's (1986) approach offers a powerful attempt to explicate the uniqueness of identical flanking consonants. However, the assumed universality of his proposal faces challenges from data derived from genetically and typologically unrelated languages. In contrast to McCarthy (1986), Odden (1988) introduces six configurations that potentially establish or divide consonant clusters through deletion and insertion (Odden, 1988: 462). Half of his configurations concern deletion while the remaining involve insertion. The configurations related to deletion are as follows:

(12) (i) Delete a vowel unless flanking consonants are identical,
(ii) delete a vowel without any condition concerning flanking consonants, or
(iii) delete a vowel only if flanking consonants are identical.

It will be shown in 4.2 that cases mentioned in 2.3 where non-high vowels may also be deleted can be predicted by the third configuration in (12). However, prior to that, it is necessary to ascertain the identity of flanking consonants in Turkish.

3.2 Defining 'sufficiently identical'

The literature presents considerable discussion concerning the identity of adjacent consonants (McCarthy, 1986: 207-208). For the purposes of this section, I will only address the points relevant to our current discussion. The explanatory value of (12i) and (12iii) depends on determining how identical the consonants need to be. Odden (1988) discusses the "sufficient" identity of the flanking consonants when criticizing the universality of antigemination. He attempts to answer the question of which features need to be shared for consonants to be sufficiently identical (Odden, 1988: 461).

According to Odden (1988), there may be cross-linguistic differences among languages in terms of the features required for sufficient identity. However, some basic features, like voicing, which are not required for sufficient identity, seem to be somewhat general across many languages. Consider the Lithuanian examples from Baković (2005):

(13)	(a)	*ati-duoti → *adduoti*	'to give back'

	*api-berti → *abberti*	'to strew all over'
(b)	*ati-ko:pti → atko:pti*	'to rise'
	api-kalbeti → apkalbeti	'to slander' (Baković, 2005: 279)

In Lithuanian, the identity of flanking consonants blocks syncope in accordance with (12i). In (13b), since the flanking consonants 't', 'k' and 'p', 'k' are not identical, syncope can be realized. In (13a), however, the existence of the flanking consonants 't', 'd' and 'p', 'b' blocks syncope, although these are not completely identical. In Lithuanian, voicing and palatalization are the features which do not necessarily have to be shared by flanking consonants to be sufficiently identical. In other words, the flanking consonants should share all other features except these two to be sufficiently identical (Baković, 2005: 280).

Drawing from our empirical observations, it can be concluded that Turkish does not mandate the flanking consonants to be entirely identical for the demonstration of certain unusual properties. This finding stands in harmony with cross-linguistic trends, where full identity between consonants is not a prerequisite for the observation of specific phonological phenomena.

In this grand linguistic opera, the characteristic feature of "voicing" steps forth from the chorus, raising its hand as an interesting contralto voice amongst the multitude. It sings a unique tune, suggesting that it is not an indispensable player when it comes to recognizing consonants as "sufficiently identical". To illustrate, the consonants 'b' and 'p' in Turkish are considered sufficiently identical despite the divergence in their voicing attributes. This conclusion is derived from the notable observation that these consonants share several integral features, with the single point of divergence being their voicing.

This opens up interesting avenues for further research and presents intriguing linguistic questions to consider. How does this particular pattern impact the overall phonological landscape of Turkish? What implications might it have on our broader understanding of language patterns? These are questions that certainly warrant further academic exploration. The ensuing section will wade into the enigmatic waters of a peculiar case of syncope through gemination in Turkish, particularly focusing on scenarios involving sufficiently identical flanking consonants (SIFCs).

4. Turkish Syncope Under a New Lens: Investigating Gemination and SIFCs

As established in Section 2, the general consensus posits that only unstressed high vowels are subject to deletion in Turkish. However, our data seem to uncover exceptional cases that do not adhere to this rule. This section investigates these intriguing cases, examining the interactions between syncope, gemination, and sufficiently identical flanking consonants (SIFCs) in Turkish. Interestingly, these anomalies are not random but appear to be rule-governed. We assess the implications of these phenomena on both stressed high vowels and unstressed non-high vowels, which are normally resistant to deletion. A complex relationship between syncope and gemination becomes evident, where the

presence of SIFCs induces unexpected syncope cases. This section offers an in-depth investigation of these interactions, unveiling some fresh insights into the phonotactic patterns of the Turkish language. The analysis is bifurcated into two main parts: 4.1 elucidates the dynamics between stressed high vowels and SIFCs within the syncope site, while 4.2 delves into the interplay between unstressed non-high vowels and SIFCs at the syncope site.

4.1 Interplay of stressed vowels and SIFCs in gemination within syncope sites

The location of stress plays a significant role in the syncope process, largely due to the fact that stressed vowels typically cannot be deleted. As discussed in section 2.1, while a cross-linguistic pattern reveals that stressed vowels are more resilient to deletion, there exist languages that allow for the deletion of stressed vowels within specific environments. Mussau, a language native to Melanesia, exemplifies such languages, permitting the deletion of stressed vowels solely in the presence of SIFCs:

(14)	*gorúru → górru*	'edible green seaweed'
	makíkile → mákkile	'sour'
	mumúmu → múmmu	'to suck'
	rarárasa → rárrasa	'saw grass' (Blust, 2001: 144)

As shown above, stressed vowels are deleted when they are situated between SIFCs. In this context, contrary to the assumptions of McCarthy (1986), syncope between identical consonants is not only permissible in Mussau but also required (Blust, 2001: 145). The case in Turkish is analogous: Stressed vowels can be deleted if they are positioned between SIFCs. Below, I will first account for the placement of stress and its influence on the syncope process. Subsequently, I will elucidate how SIFCs enable the deletion of stressed vowels.

At a cursory glance, the placement of stress does not seem to pose a significant hurdle for syncope in Turkish. This is because the majority of Turkish roots are stressable on the final syllable (Göksel & Kerslake, 2005: 26; Lees, 1961: 41). In other words, stress usually does not fall on the syncope site which has to be followed by another vowel, as in the case of *burunú ~ burnú* "nose (Acc.)". However, the matter is not as straightforward. There are, indeed, irregular cases. Clitics and specific suffixes in Turkish do not bear stress. The non-stressed nature of these elements causes the stress to fall on the preceding vowel, which could potentially impact the feasibility of vowel deletion. Consider the following examples:

(15)	*nehir-im → nehrím* (river-Poss.1.Sg.)	'my river'
	*nehir-im → *néhrim* (river-Cop.1.Sg.)	'I am a river' (Göksel & Kerslake, 2005: 19).

In the latter example, the first-person singular copula is unstressable in Turkish. Being a clitic, it assigns the stress to the preceding vowel. This factor likely explains why ***néhrim** "I am a river" is ungrammatical in Turkish. Instead, it is pronounced as *nehírim*, with stress on the penultimate syllable. In the former example, since the syncope site is not stressed, vowel deletion is feasible. However, if the flanking consonants are sufficiently identical, syncope is executed despite the presence of the stressed high vowel. Refer to the following examples:

(16)

büy-ű́yor → bű́yyor (grow-Prog.)	'He/she is grow up'
er-ir-im → errim (melt-Aor.-Agr.1.Sg.)	'I melt'
gemí-mi → gémmi (ship-Q.)	'Is it a ship?'
gönder-ír-im → göndérrim (send-Aor.-Agr.1.Sg.)	'I send'
gör-ür-üm → görrüm (see-Aor.-Agr.1.Sg.)	'I see'
hafíf-im → háffim (light-Cop.1.Sg.)	'I am light'
iyí-yim → íyyim (good-Cop.1.Sg.)	'I am good'
kapalílar → kapállar (closed-Cop.3.Pl.)	'They are closed'
korú-r-um → kórrum (protect-Aor.-Agr.1.Sg.)	'I protect it'
lezíz-im → lézzim (delicious-Cop.1.Sg.)	'I am delicious'
on-ún-um → ónnum (3.Pro.-Gen.3.Sg.-Cop.1.Sg.)	'I belong to him/her'
ver-ir-im → verrim (give-Aor.-Agr.1.Sg.)	'I give'
yara-síz-ım → yarássım or yaraszım (wound-Der.-Abl.)	'I am unwounded'

In these irregular cases, as observed, it is not the rightmost vowels that bear the stress, but the vowels in the syncope site. Despite the fact that stress typically impedes syncope universally, these stressed vowels can still undergo deletion when occurring between either identical (as in the first twelve examples) or sufficiently identical flanking consonants (as seen in the last example). This suggests a unique form of interaction transpires between SIFCs. Stressed vowels resist syncope, unless gemination

can potentially be realized. In such cases, to facilitate gemination, stressed high vowels are "somehow" subject to deletion. However, it is important to note that for deletion to occur, the stressed vowels must be high. Non-high vowels can only be deleted if they are unstressed, a subject that is further discussed in the following subsection

4.2 Interplay of non-high vowels and SIFCs in gemination within syncope sites

In this subsection, the relationship between the sufficient identity of flanking consonants and non-high vowels is investigated. The character of the alternating vowel can serve as a reliable indicator for anticipating the manifestation of the process. In Turkish, non-high vowels can only be deleted if they are unstressed and the flanking consonants are sufficiently identical[2].

As established in (6ii), current literature extensively documents that non-high vowels in the syncope site cannot be deleted. Our data corroborate this observation:

(17)

kural-a → ?kurla (rule-Dat.)	'to the rule'
*kuşet-e → *kuşte* (couchette-Dat.)	'to the couchette'
*külota → *külta* (underpants-Dat.)	'to the underpants'
*pilot-a → *pilta* (pilot-Dat.)	'to the pilot'
*surat-a → *surta* (face-Dat.)	'to the face'
*tansiyon-a → *tansiyna* (blood pressure-Dat.)	'to the blood pressure'
viraj-a → ?virja (bend-Dat.)	'to the bend (in a road)'
yılan-a → ?yılna (snake-Dat.)	'to the snake'

As can be seen in (17), all of the syncope sites include a non-high vowel. Therefore, none of them can be deleted; all the rightmost forms are unacceptable in Turkish. However, our data show that contrary to (6ii), there are cases where non-high vowels can also be deleted. The sufficient identity of flanking consonants can lead to the deletion of a non-high vowel in the syncope sites to create geminates, as seen in the following examples:

[2] As an intriguing case, some speakers may also delete unstressed non-high vowels even without SIFCs if the flanking consonants are capable of forming a valid cluster in Turkish, provided certain conditions are met. For more detailed information, please refer to İskender (2008).

(18)

boza-sı → bossı or bozsı (a fermented drink-Poss.3.Sg.)	'his/her boza'
balo-lar → ballar (ball-Pl.)	'balls, dances'
hamam-ı → hammı (Turkish bath-Acc.)	'the Turkish bath (Acc.)'
geleli → gelli (come-Ger.)	'since coming'
kebap-ı → kebbı (roasted meat-Acc.)	'the roasted meat (Acc.)'
salata-dan → saladdan or salatdan (salad-Abl.)	'from the salad'
sebep-i → sebbi (cause-Acc.)	'the cause (Acc.)'
terör-ü → terrü (terror-Acc.)	'the terror (Acc.)'
yarar-ı → yarrı (benefit-Acc.)	'the benefit (Acc.)'
zarar-ı → zarrı (damage-Acc.)	'the damage (Acc.)'

Drawing upon the observations presented in (18), it becomes evident that non-high vowels situated between SIFCs are subject to non-pronunciation. This intriguing phenomenon is facilitated by the specific characteristics of the flanking consonants and the existing possibility for gemination. With the process of syncope in operation, geminates are formed, which underpin an interesting dynamic of the Turkish phonology.

The aforementioned gemination, interestingly, allows for the deletion of even non-high vowels, a process that is not customarily encountered in phonotactic patterns. This distinct feature suggests that Turkish aligns more accurately with gemination language characteristics in Odden's (1988) classification. Following the assessment and analysis of the data collated in this section, it is appropriate to revise the previously stated phonological conditions governing syncope in Turkish, as outlined in (10). The revised conditions are as follows:

(19) (i) Forms exhibiting a VCvCV pattern may undergo syncope only if 'v' is an unstressed high vowel.
(ii) Forms exhibiting a CCvCV pattern may undergo syncope only if 'v' is an unstressed high vowel and the preceding consonants are capable of forming a possible cluster.
(iii) Forms exhibiting a VCvCV pattern may undergo syncope even if 'v' is either a stressed high vowel or an unstressed non-high vowel, provided the syncope site contains SIFCs capable of creating geminates.

These conditions, guided by empirical observations, strongly indicate that syncope in Turkish is not predominantly a lexical phenomenon, as one might assume, but rather a phonological one. The process of syncope in Turkish, thus, provides novel insights into the interplay between consonants and vowels, as well as the importance of stress positioning. As the syncope is applied, geminates are generated, contributing to the language's unique phonotactic patterns. These findings reinforce the notion of Turkish as a language favoring gemination, thereby facilitating a unique scenario where both stressed high vowels and unstressed non-high vowels can be deleted to create geminates.

5. Concluding Remarks

Turkish presents a variety of peculiar and complex linguistic phenomena, such as the presence of optional classifiers and their intriguing restrictive function (Turgay, 2020). Echoing this complexity and optionality, the present paper shifts its focus towards the distinctive characteristics of syncope and gemination in Turkish, thereby contributing to the expanding corpus of knowledge on the intricacies of the Turkish linguistic framework. In the presented research, the phenomenon of syncope via gemination in Turkish was scrutinized. Theoretical foundations and novel data relating to SIFCs were examined, thereby enhancing our understanding of their complex interactions, which are crucial to the understanding of Turkish phonology.

According to the data, syncope was found to be prevalent and optional in spoken language, with the possibility of the same word being pronounced in both its alternated and non-alternated forms within the same sentence. In contemporary Standard Turkish, two additional tendencies were identified: one group of speakers who frequently applied syncope when the phonological environment allowed, and another who consistently pronounced the full forms. The inability to distinguish idiolectic differences was due to the data limitations, being confined to certain subjects' speeches and TV recordings in the absence of statistical information.

The study demonstrated that syncope in Turkish is both a predictable outcome of the phonological structure and a variable process, contingent upon the nature of the alternating vowels and adjacent consonants. Syncope in modern Standard Turkish was found to have become increasingly variable and optional over time, as observed in spoken data. This evolution suggests the need to reassess our understanding of this phonological process. Traditional notions about its obligatory nature or lexical determination may require revision in light of evolving language use.

The research expanded the existing body of literature on syncope and gemination while underscoring its potential for cross-linguistic comparisons and the examination of similar phenomena across languages. The SIFC analysis provided valuable insights into the conditions governing syncope-induced gemination in Turkish, thereby emphasizing the critical role of gemination. Future research could investigate the phonological factors associated with syncope and examine dialectal variations that

influence the manifestations of syncope and gemination. Enhancing the understanding of such complex phonological processes is expected to enrich overall comprehension of language phenomena.

As a concluding note, the exploration of syncope in modern Standard Turkish demonstrates the importance of using naturally occurring spoken data in the study of phonological processes. The data shed light on the nuanced aspects of syncope, providing a more comprehensive and accurate depiction of its occurrence in the language. This trailblazing research initiative not only enriches the burgeoning academic literature on gemination but also provides a robust platform for cross-linguistic comparison. This study offers a new approach to the complex dynamics of syncope and consonant interaction in Turkish, which may be helpful in guiding further explorations of similar phenomena in other languages.

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