

Segmental English Phonemes In NF's Rap Song *Story*: Exploring Type And Rule

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Abstract

This study aims to identify phonemes' changing in NF rap song, in terms of the types of phonological rules in vowels and consonants; assimilation, dissimilation, and deletion. Furthermore, this study figures out how these phonological rules are formed. The rap song *Story NF* is chosen as the object study in terms of research on phoneme analysis in rap song is still limited. This research applied a qualitative approach. This research employs Lass' (1984) theory as the main theory to analyze data. The data found fifty cases which consist of six regressive assimilation, nine progressive assimilation, four fusional assimilation, two dissimilation, and thirty-three deletion processes. They consist of twenty-two aphaeresis, four syncope, and seven apocope. The findings show that progressive assimilation is the most frequently applied process from the assimilation aspect. At the same time, aphaeresis is the most commonly used process in the deletion aspect, highlighting how connected speech is naturally formed to adapt to the rhythm-driven nature of rap music. All of this connected speech occurs because of rapid speech.

Keywords: *phoneme, phonological rules, assimilation, deletion, dissimilation*

Introduction

When people talk or sing, listener thought that the speaker or the singer change they say things to keep the rhythm and flow. This phenomenon happened in phoneme. However, Patel and Iversen (2021) stated that the changes is not "the real change", it is phoneme manipulation to synchronize the beat. This study is aimed to identify how these phenomena are formed. The phenomena called phonological rule. According to Lass (1984), phonology is a branch of linguistics that deals with "the sounds of language." Phonology is more focused on how sounds work, behave, and are organized as language items. Gussenhoven & Jacobs (2017) also state that phonology is the part of linguistics that tries to explain how this type of human vocal sound is put together, both in general and in specific languages. In addition, Skandera & Burleigh (2005) also pertains that phonology focused on language or proficiency that categorized into two branches: segmental phonology, which focuses on individual speech sounds are called phonemes, and suprasegmental phonology, which examines aspects of speech beyond individual sounds, such as tongue position, shape of lips, voicing, place and manner of articulation. Segmental phonology relies on dividing language into distinct speech sounds or commonly called phoneme as limited set of commonly used sounds (vowels and consonants) that can be identified in any language (Roach, 2013). Assimilation, dissimilation, and deletion are examples of phoneme change that lead to how speech sounds are made (Lass, 1984) called Phonological rule. These natural alterations show how language changes when the rhythm is complicated, which shows how important phonological rules are in music.

Ilxomovna & Rustam (2024) say that phoneme is a part of linguistics that studies how sound is produced, delivered, and received. It is in line with Lass theory (1984) that stated phoneme is the smallest unit of language that capable of conveying meaning. In addition. Phoneme is not just actual sounds but rather than sound categories within the language system. Phoneme represent the speaker's sound that helps him and his listeners recognize and distinguish words. For instance, "pig" and "big" are contrasting and have distinct meanings; therefore, the phonemes /p/ and /b/ signify different sounds. Phonemes in real speech can change depending on the situation without changing the meaning. This change is governed by phonological rules. Then, how the result of phonological rules are explained physically without changing meaning is called phonetics (Lass, 1884). It implies that phonological rules are mechanisms that explain how phonemes can change into various real forms (phonetic phenomena) when spoken in different situations without changing the meaning. Briefly it can be said that phonological rule is the rule or recipe of the changing sound of phoneme, while phonetics is physical proses how to change sound of phoneme based on phonological sound. For example, the word "input" may be pronounced as /'input/ or /'imput/. In terms of Phonological rule, there are three kinds of phonological rules:

Assimilation is the process in which one linguistic segment becomes similar to or identical with another or when two segments become more similar (Lass, 1984). Phoneme assimilation is when a phoneme changes to become increasingly similar or even identical to a neighboring phoneme. For example, *that page* is not pronounced as /ðæt peɪdʒ/ but as /ðæp peɪdʒ/. Assimilation can be classified into three types: 1) Regressive; This phonological process in which the end phoneme of a preceding word or syllable becomes similar to or identical to the initial phoneme of the following word or syllable (Lass, 1984). For example, the phoneme /t/ transforms and is replaced by /p/ in the word *that page* /ðæp peɪdʒ/. 2) Progressive Assimilation; this type is the opposite of regressive assimilation (Lass, 1984). This phenomenon arises when the first sound of the second word or syllable becomes comparable to or identical to, the last sound of the preceding word or syllable. For instance, the phrase *kill him* is not pronounced as /kɪl hɪm/ but as /kɪl ɪm/. The phoneme /h/ in the word "him" changes to /l/ when the preceding word ends with the phoneme /l/. 3) Fusional Assimilation; the last type of assimilation aspect is when two phonemes mutually influence each other (Lass, 1984). The terminal phonemes of the preceding word or syllable and the initial phoneme of the following word or syllable mutually influence each other, transforming into a new sound. *Get you*, for example, is not pronounced as /ɡet ju:/ but as /ɡe tʃu:/. The phonemes /t/ and /j/ undergo mutual influence, resulting in a transition to a new sound, /tʃ/.

Dissimilation is the antithesis of the assimilation process (Lass, 1984). A phoneme exhibits a tendency not to acquire the characteristics of adjacent phonemes. The purpose of dissimilation is omitting a phoneme to prevent the transfer of characteristics from neighboring phonemes by excluding the problematic one. The pronunciation of the word *surprise*, for instance, is not /sə'praɪz/ but rather /sə'praɪz/. The phoneme /r/ in the syllable /sə'r/ is removed since the sound /r/ is present in the following syllable /praɪz/.

Deletion, or elision, refers to combining a phoneme with another (Lass, 1984). This mechanism yields a single phoneme during articulation (Birjandi & Salmani-Nodoushan, 2005). It implies that deletion refers to the omission of a sound or syllable from a word. The term "*Potato*," for example, is not articulated as /pə'teɪ.təʊ/ but as /p'teɪ.təʊ/. Deletion is classified into a more specific conventional terminology: 1) Aphaeresis;

aphaeresis refers to initial deletion, where a phoneme is lost at the beginning of a word. The pronunciation of "*I am*" is /aɪm/, written morphologically as "I'm" (Lass, 1984). This vocabulary encompasses the contracted forms used in English, such as "I've," representing "I have," "I'd," representing "I would," "I had," "you're," representing "you are," and so on. 2) Syncope, sometimes known as syncopation, refers to the loss of vowels. However, it may also include consonants. The pronunciation of the word *dictionary* is correctly rendered as /ˈdɪkʃənəri/ in British English. However, it is adjusted to /ˈdɪkʃneri/, where the schwa sound is omitted (Lass, 1984). Syncope is commonly caused by three things. First, the loss of phonemes is mainly influenced by the low prominence of a vowel that follows voiceless stop consonants, specifically /p/, /t/, and /k/. The following words are frequently articulated without the weak vowel schwa, for example, *Potato* /pˈtato/, *tomato* /tˈmeto/, and *canary* /kˈnæri/. Second, the phoneme can be excluded in cases where a weak vowel precedes syllabic consonants such as /l/, /m/, /n/, and infrequently /r/. The word "*seven*" is pronounced as /ˈsevn/ with the deletion of the schwa sound before the phoneme /n/ (Birjandi & Salmani-Nodoushan, 2005). Third, the deletion process can be triggered by intricate consonant clusters. English phonotactic restrictions involve the construction of numerous words with three or four phonemes or, occasionally, two phonemes that are challenging to enunciate. Therefore, when native speakers pronounce these words, they typically omit one or more phonemes from the cluster patterns. For instance, the pronunciation of the word *clothes* /kləʊðz/ is often changed to /kləʊz/. Texts are frequently pronounced as /teks/ by omitting the sounds /t/ and /ts/, respectively (Birjandi & Salmani-Nodoushan, 2005). 3) Apocope, or apocopation, omits a word's final phoneme (Lass, 1984). When a word ends with the stop alveolar consonants /t/ and /d/ and is immediately followed by a word that starts with a consonant, the final phoneme of the first word is omitted. For example, "*last week*" is pronounced as /læs wik/, and "*black and white*" is pronounced as /blæk æn waɪt/ (Birjandi & Salmani-Nodoushan, 2005; Lass, 1984).

Some related studies found in terms of phonological rules; Wulandari et al. (2023) in "A phonological Analysis of Alison Found in SZA's Selected Song in *SOS* Album" found that Vowel elision can be classified into two cases: the first involves the vowel /ə/ and has two data instances. In contrast, the second case consists of the vowel /ɪ/ and has 10 data instances. Consonant elision exhibits eight distinct situations. The initial case is the elision of /t/ (17 data), followed by the second case of /d/ (10 data). The third and fourth cases involve the elision of /p/ and /r/ (2 data respectively), while the fifth to seventh cases involve the elision of /v/, /z/, and /n/ correspondingly, occurring just once. There are three cases of syllable elision: /bɪ/, /ən/, and /əm/. In addition, Hatimah et al. (2022) in "English Phonological Rules in the Movie *Not Cinderella's Type* (2018)" found that assimilation occurred 115 times under progressive and regressive assimilation, and elision occurred 570 times in the form of aphaeresis and apocopation types. The results indicate that elision is frequently used by the characters in the movie *Not Cinderella's Type*. The last is Firdhani et al. (2018) in "The Use of Consonant Elision by Sri Mulyani During Her Interview Session with The Banker" found that during Sri Mulyani interview, the used consonant elision is 26 times. She tends to omit the phonemes /t/ (19 times), /d/ (5 times), /r/ (1 time), and /s/ (1 time). All three studies above focus on identifying phonological rule, even though with varying approaches and perspectives in each type of phonological rule. However, Hatimah et al. (2022) and Wulandari et al. (2023) are different because their main focus was merely elision as a part of deletion only, while Firdhani et al. (2018) was on two types of phonological rules.

There are similarities between the related study and this study in terms of method, which is qualitative.

The difference between the three related studies and this study lies in the target goals and research object. Hatimah et al. (2022) and Wulandari et al. (2023) focused on only one type of phonological rule, and Firdhani et al. (2018) focused on two. Furthermore, Hatimah et al. (2022) and Firdhani et al. (2018) chose non-music as their research objects, while Wulandari et al. (2023) the pop music genre. In contrast, this study chose rap songs as its research object and focused on three types of phonological rules simultaneously. Rap song as object is chosen in terms of phonological rules research in rap song that focused on three type of phonological rules is still limited.

Despite growing research on phonological rules in rap songs that focus on three types of phonological rules simultaneously is still limited, a comprehensive analysis remains, covering multiple phonological rules in rap music is lack. NF's song *Story* offers valuable material to explore these phenomena. In terms of this, this study focuses to analyze the use of 3 phonological rules in the lyrics of NF's song *Story*, identifying the types of rules that occur and how they affect consonant and vowel articulation, ultimately contributing to the broader understanding of phonology in performance.

Based on the above reason, this research aims to address two research question (1) What are the types of phonological rules in the song *Story*? and (2) How are the phonological rules in vowel and consonants' song *Story* formed? In response to these questions, the study sets out the following objectives: first, to identify the phonological rules found in the rap song *Story* by NF; and second, to analyze how the phonological rules in vowel and consonants' NF the rap song from *Story* are formed.

Method

The study applied descriptive qualitative approach. According to Kothari (2004), the research descriptive qualitative approach is a method that investigates a topic by doing a comprehensive examination and delivering a detailed depiction. This strategy aims to offer an elaborate depiction of the facts. It gathers comprehensive data and provides a thorough analysis of the subject being examined (Creswell & Creswell, 2018). The data for this research was gathered through song transcript, audio song, IPA chart, phonetic analysis table, and fields note observation as the data instruments. According to Kothari (2004) audio listening is a method and methodology used to collect data. The analysis of phonological rules using Lass' (1984) theory followed a clear set of steps. First, the speech sounds in the lyrics were found, paying attention to how they changed, especially when they were assimilated, dissimilated, or deleted. Next, these changed sounds were written down using phonetic transcription. The Online Oxford Dictionary is applied to support data analysis because it has detailed phoneme transcriptions. After the transcription was done, each word or phrase was mapped how it was pronounced based on the Lass (1984) theory. The pronunciation compared to the transcription to find any sounds that were alternated or omitted. Next, the research explained how each phonological rules formed in the songs. Finally, then it leads conclusions how NF exploited each process, assimilation, dissimilation, and deletion in their lyrics. To make the analysis clearer and easier to understand, these procedures were put in a table. The collected data is organized and presented as an essay to provide a thorough description with a table and a detailed.

Results

After analyzing carefully to the speech produced by NF's songs *Story*, the study noticed that the rules mainly occurred in the Verses. Although assimilation, dissimilation, and deletion are typical of rapid, casual speech used by native speakers, in this case, deletion was more frequently used by NF, specifically in the aphaeresis. The summary of the data finding can be seen in the following table.

Table 1. Summary of the assimilation, dissimilation, and deletion from the songs entitled *Story*.

Aspect of Connected Speech	Times	
Assimilation	Regressive	6
	Progressive	9
	Fusional	4
Dissimilation		2
Deletion	Aphaeresis	22
	Syncope	4
	Apocope	7
Total		50

Discussion

In the Data Analysis, the collected data would be analyzed, and described by description with tables to made the analysis easily to follow:

Assimilations in the song *Story*

Lyric 2: "*Should probably* get up, so I'm not late"

Datum 1: "*Should probably*"

The Process of Assimilation

Word/Phrase	Sound Alteration/Omitted	Kinds of Assimilation
Should probably /ʃʊd 'prɑ:bəblɪ/ → /ʃʊp 'prɑ:bəblɪ/	/p/	Regressive

Based on the word *should* /ʃʊd/, which is pronounced /ʃʊp /, undergoes an assimilation, specifically a regressive process because of the influence of the bilabial stop consonant /p/ in the word *probably* before the syllabic fricative consonant /s/ in the word *should*. The word *should* was phonetically transcribed and faithfully pronounced as /ʃʊd/. Still, the speaker pronounces it as /ʃʊp/ by altered to bilabial stop consonant /p/ (as a voiceless consonant) in the ending of the first syllable. It occurs in the first syllable after /ʃ/ *should* was a syllabic bilabial stop consonant /p/. The position of an alveolar stop consonant /d/ as the voiceless consonant in the word, which has the features middle and central, occurs before a syllabic fricative consonant /s/. The alveolar stop consonant /d/ "*should*" was alternated in a syllable to make easier to pronounce when speaking rapidly. This process is described in Lass' (1984) theory of phonological rules, specifically about regressive assimilation, which is a phonological process in which the ending phoneme of a preceding word or syllable becomes similar to or identical to the initial phoneme of the following word or syllable. Bedu (2024) also argues that this form of assimilation happens when a sound alters to align with the following sound in the phrase. This form of assimilation occurs in "*Banlam*" phonetics. The term *Ban* means "house", while *lam* means "mine"; hence, the phrase *Ban lam* translates to "my house". However, due to assimilation, it is now pronounced as *Ballam*, where the term *lam* (meaning "mine") still exists, but the /n/ in *Ban* was substituted

with /l/, altering it to *Bal*. Through assimilation, the two words coalesce into a one term: *Bal* = *lam* = *Ballam* (My house).

Lyric 42: "Head of the man that's *behind the counter*"

Datum 2: "Behind the counter"

The Process of Assimilation		
Word/Phrase	Sound Alteration/Omitted	Kinds of Assimilation
Behind the counter		
/br'haɪnd ðə 'kaʊntər / → /br'hain nə 'kaʊntər/	/n/	Progressive

Based on the word *the* /ðə/, which is pronounced /nə/, undergoes an assimilation, specifically a progressive process because of the influence of the nasal consonant /n/ in the word *behind* after the syllabic fricative consonant /h/ in the word *behind*, the reason why the word *behind* ends with a phoneme /n/ not /d/ sound would be explained on the deletion type analysis, because in this phrase more than one phonological rules phenomenon occurs. So, the word *the* was phonetically transcribed and faithfully pronounced as /ðə/. Still, the speaker pronounces it as /nə/ by altered to nasal consonant /n/ in the third syllable. It occurs in the third syllable after /h/ *behind* was a syllabic nasal consonant /n/. The position of a stop consonant /ð/ as the voiced consonant in the word, which has the features middle and central, occurs before a syllabic fricative consonant /h/ *behind*. The dental fricative consonant /ð/ *the* was altered in a syllable to make easier to pronounce when speaking rapidly. This process was described in Lass' (1984) theory of phonological rules, specifically about progressive assimilation, which is when the first sound of the second word or syllable becomes comparable to or identical to, the last sound of the preceding word or syllable. Al-Nabhani & Madiseh (2025) also noted progressive assimilation in the word *thanks*, where the suffix /s/ is articulated as a voiceless alveolar fricative /s/, influenced by the preceding voiceless velar plosive /k/.

Lyric 52: "Which ones do you want? Which ones do you want?"

Datum 3: "Which ones"

The Process of Assimilation		
Word/Phrase	Sound Alteration/Omitted	Kinds of Assimilation
Which ones		
/wɪtʃ wʌnz/ → /wɪʃ wʌnz/	/ʃ/	Fusional

Based on the word *which* /wɪtʃ/, which is pronounced /wɪʃ/, undergoes an assimilation, specifically a fusional process because of the glide consonant /w/ in the word *ones* with affricative consonant /tʃ/ in the word *which* influenced each other resulted another sound /ʃ/ in the word *which*. So, the word *which* was phonetically transcribed and faithfully pronounced as /wɪtʃ/. Still, the speaker pronounces it as /wɪʃ/ by altered to fricative consonant /ʃ/ in the ending of first syllable. It occurs in the the syllable after /w/ *which* was a syllabic nasal consonant /ʃ/. The position of an affricative consonant /tʃ/ *which* as the voiceless consonant in the word, which has the features middle and central, occurs before a syllabic glide consonant /w/. The affricative consonant /tʃ/ *which* was altered in a syllable to make easier to pronounce when speaking rapidly. This process was described in Lass' (1984) theory of phonological rules, specifically about fusional assimilation, is when two phonemes mutually influence each other. Ndaalu & Ngulube (2024) also argue that this example illustrates was

referred to as coalescence, or coalescent assimilation; the final /t/ or /d/ before an initial /j/ frequently amalgamate to produce /tʃ/ or /dʒ/, resulting in *not yet* being pronounced as /ʃet/ and *could you* as /kudʒu/.

Dissimilation in the song *Story*

Lyric 40: “*Crouching* on the floor”

Datum 4: “*Crouching*”

The Process of Dissimilation

Word/Phrase	Sound Alteration/Omitted
Crouching	/r/
/'kraʊtʃɪŋ/ → /'kʌʊtʃɪŋ/	

Based on the word *crouching* /'kraʊtʃɪŋ/, which is pronounced /'kʌʊtʃɪŋ/, undergoes a dissimilation process because of the loss of the liquid consonant /r/ in the word “crouching” after the syllabic affricative consonant /tʃ/ *ch*. The word *crouching* was phonetically transcribed and faithfully pronounced as /'kraʊtʃɪŋ/. Still, the speaker pronounces it as /'kʌʊtʃɪŋ/ by omitting a liquid consonant /r/ (as a voiceless consonant) in the first syllable. It occurs in the first syllable after /'k/ is a syllabic consonant /tʃ/. The position of a liquid consonant /r/ as the voiceless consonant in the word, which has the features middle and central, occurs before a syllabic consonant /'k/. The liquid consonant /r/ was omitted in a syllable to make some short syllables shorter and easier to pronounce when speaking rapidly. This process was described in Lass’ (1984) theory of phonological rules, specifically about dissimilation, is omitting a phoneme to prevent the transfer of characteristics from neighboring phonemes by excluding the problematic one. Amalia & Supri (2024) also assert that when two segments of the same word exhibit identical phonetic properties, this phenomenon is referred to as dissimilation. Typically, one segment possesses a secondary segment that can prompt the other segment to modify one or more phonetic attributes, such as relinquishing its continuance or transforming its voice quality. The term *'em* signifies a non-standard contraction without established textual norms, originating from *them*. This contraction, pronounced /əm/, demonstrates a phonological dissimilation process by transforming *them* to /əm/.

Lyric 89: “I don't know, I think it's still *behind the counter*”

Datum 5: “*Counter*”

The Process of Dissimilation

Word/Phrase	Sound Alteration/Omitted
Counter	/t/
/'kaʊntər/ → /'kaʊnər/	

The word *behind* /bɪ'hænd/, which was pronounced /bɪ'həm/, undergoes a deletion process because of the loss of the final /t/. This process of deletion refers to the loss of the stop alveolar consonant cluster /t/ that appears in the word *cannot* that was pronounced /bɪ'həm/ while phonetically transcribed as /bɪ'hænd/. This apocope process facilitates more straightforward pronunciation in rapid conditions, such as when singing. This process was described in Lass’ (1984) theory of phonological rules, specifically about apocope deletion, when a word ends with the stop alveolar consonants /t/ and /d/ and is immediately followed by a word that starts with a consonant, the final phoneme of the first word is omitted. Diani (2018) examined the word *climb*, pronounced /klaɪm/, which undergoes an apocope process due to the omission of the consonant /b/ in the presence of several consonant letters. In a specific

term, /b/ was replaced by /m/ at the ending of the word. The letter /b/ is consistently silent in the spelling sequences mb when they appear at the end of words, such as in *climb*.

Deletion in the song *Story*

Lyric 9: "I walk out the bedroom, my *roommate's*"

Datum 6: "Roommate's"

The Process of Deletion

Word/Phrase	Sound Alteration/Omitted	Kinds of Deletion
Roommate is → Roommate's /ˈruːmeɪt ɪz/ → /ˈruːmeɪts/	/ɪ/	Aphaeresis

The phrase *Roommate is* /ˈruːmeɪt ɪz/, was shortened as *Roommate's* pronounced /ˈruːmeɪts/. This analysis includes contracted forms, as they morphologically consist of abbreviated words, known as contractions. The above phrase was phonologically characterized by the process of aphaeresis due to the omission of a phoneme at the beginning of the word, such as *is* /ɪz/ pronounced as /z/ after the second syllable bilabial nasal consonant (voiced) /m/. The loss of vowel /ɪ/ in this phrase above, which the feature high and front, occurs in the initial phoneme of *is* /ɪz/ and the phrase above is included in contracted form. This aphaeresis process facilitates easier pronunciation in rapid conditions, such as in a song. This process was described in Lass' (1984) theory of phonological rules, specifically about aphaeresis deletion, where a phoneme is lost at the beginning of a word. Additionally, Febriyanti (2015) also analyzed 's in the word *heart's* encodes the short form of to be *is*.

Lyric 14: "Probably sells drugs, but she won't say"

Datum 7: "Probably"

The Process of Deletion

Word/Phrase	Sound Alteration/Omitted	Kinds of Deletion
Probably /ˈprəbəbli/ → /ˈprəb'li/	/ə/	Syncope

The word *probably* /aɪ æm/ was pronounced /ˈprəb'li/. This analysis includes contracted forms, as they morphologically consist of abbreviated words, known as contractions. The word was phonologically characterized by the process of syncope due to the omission of refers to the loss of vowels, such as /ə/ *probably* pronounced as /ˈprəb'li/. The loss of vowel /aɪ/ in this phrase above, which the feature central and middle, occurs in the initial phoneme of /b/. The preceding deletion process happened at the beginning of the word, thereby categorizing this type of deletion as aphaeresis. This syncope process facilitates easier pronunciation in rapid conditions, such as in a song. This process was described in Lass' (1984) theory of phonological rules, specifically about aphaeresis deletion, where a phoneme was lost at the beginning of a word. Diani (2018, p. 105) analyzed the term *tonight* /tə'nait/, noting that its pronunciation /tnait/ results from the syncope process, namely the omission of the schwa sound /ə/ following the syllabic consonant /n/. The word *tonight* is phonetically transcribed as /tə'nait/. However, the speaker articulates it as /tnait/ by omitting the schwa /ə/ in the initial syllable. It transpires in the initial syllable following the syllabic consonant /n/. The vowel schwa /ə/ functions as the weak vowel in the word, characterized by the properties of being middle and central, before the syllabic consonant /n/.

Lyric 42: “Head of the man that's *behind* the counter”

Datum 8: “Behind”

The Process of Deletion		
Word/Phrase	Sound Alteration/Omitted	Kinds of Deletion
Behind /br'haɪnd/ → /br'ham/	/d/	Apocope

The word *behind* /br'haɪnd/, which was pronounced /br'ham/, undergoes a deletion process because of the loss of the final /t/. This process of deletion refers to the loss of the stop alveolar consonant cluster /t/ that appears in the word *cannot* that was pronounced /br'ham/ while phonetically transcribed as /br'haɪnd/. This apocope process facilitates more straightforward pronunciation in rapid conditions, such as when singing. This process was described in Lass' (1984) theory of phonological rules, specifically about apocope deletion, when a word ends with the stop alveolar consonants /t/ and /d/ and is immediately followed by a word that starts with a consonant, the final phoneme of the first word is omitted. Diani (2018) examined the word *climb*, pronounced /klaɪm/, which undergoes an apocope process due to the omission of the consonant /b/ in the presence of several consonant letters. In a specific term, /b/ was replaced by /m/ at the ending of the word. The letter /b/ is consistently silent in the spelling sequences mb when they appear at the end of words, such as in *climb*.

The analysis of the song *Story* reveals three major types of phonological rules: assimilation, dissimilation, and deletion. Assimilation is the most frequently found process, categorized into regressive, progressive, and fusional types. Examples include phrases like *don't die* (/daʊnt daɪ/ → /daʊnd daɪ/) for regressive assimilation, *made him* (/meɪd hɪm/ → /meɪd dɪm/) for progressive assimilation, and *did you* (/dɪd ju/ → /dɪd dʒu/) for fusional assimilation. Dissimilation appears less often, such as in *crouching* (/kraʊtʃɪŋ/ → /kaʊtʃɪŋ/), where a sound is altered to be less similar to a neighboring sound. Deletion is also common and consists of three types: aphaeresis (e.g., *because* → 'cause), syncope (e.g., *probably* → /prəbli/), and apocope (e.g., *trust* → /trʌs/). These phonological rules aim to simplify pronunciation and accommodate the natural rhythm of speech, especially in musical contexts. The findings align with previous studies. Wulandari et al. (2023) similarly identified various types of elision in vowel, consonant, and syllable in SZA's *SOS* album, emphasizing that vowel and consonant elisions are prominent in sung language. Hatimah et al. (2022) also found that elision occurred more frequently than assimilation in the movie *Not Cinderella's Type*, recording 570 cases of elision, showing how phonological rules simplification supports fluid and natural speech in audiovisual media. Likewise, Firdhani et al. (2018) found that consonant elision, especially of /t/ and /d/, was prevalent in spoken interviews, reinforcing the widespread application of these rules beyond music and into formal spoken contexts.

Phonological processes in the song *Story* affect both consonants and vowels. Consonant changes are primarily shaped by assimilation and deletion. For instance, *not picky* (/nɒt 'pɪki/) becomes /nɒp 'pɪki/ through regressive assimilation, while consonant deletion at the end of words occurs through apocope, as seen in *trust* → /trʌs/ and *brought* → /brɔː/. Vowel changes are most commonly affected by deletion, particularly aphaeresis and syncope. For example, the phrase *I am* becomes *I'm* (/aɪm/) through aphaeresis, and the schwa /ə/ is removed in *probably*, resulting in /prəbli/. These changes occur naturally in rapid speech and help match the rhythm of musical lyrics. The prominence of consonant elision in *Story* echoes the findings of Firdhani et al. (2018), who noted frequent omissions of /t/, /d/, and /r/ in formal interviews.

Similarly, Wulandari et al. (2023) found dominant cases of consonant elision, especially /t/ and /d/ in SZA's lyrics, confirming the tendency to simplify articulation in fast-paced songs. Hatimah et al. (2022) further support this by revealing that vowel and consonant deletions are heavily used in casual spoken dialogue in film, making pronunciation smoother and more efficient. These comparisons highlight how both vowel and consonant alterations serve the shared purpose of enhancing fluency across various spoken and musical forms of the English language.

Conclusion

Based on data finding and discussion, the writers figure out some conclusions as follows: The song *Story* shows three significant types of phonological rules: assimilation, dissimilation, and deletion. Assimilation was the most dominant process and appears in three forms: regressive, progressive, and fusional assimilation. In regressive assimilation, a following sound affects the preceding one, such as in the phrase *don't die* (/doʊnt daɪ/ → /doʊnd daɪ/). Progressive assimilation occurred when a preceding sound influences the following one, as seen in *made him* (/meɪd hɪm/ → /meɪd dɪm/). Fusional assimilation happened when two adjacent sounds influence each other and produce a new phoneme, for example, *did you* (/dɪd ju/ → /dɪd dʒu/). Dissimilation, though less common, involves changing a sound to make it less similar to a neighboring one to improve clarity, such as in *crouching* (/kraʊtʃɪŋ/ → /kaʊtʃɪŋ/). Deletion processes include aphaeresis (loss of initial sounds, e.g., *because* → *'cause*), syncope (loss of medial sounds, e.g., *probably* → /prəbli/), and apocope (loss of final sounds, e.g., *trust* → /trʌs/). These phonological rules are frequently used in the song to enhance natural speech flow within a musical context.

The phonological rules in the song *Story* by NF affected both consonants and vowels, demonstrating how natural speech was simplified in rhythm-driven contexts. Consonant changes were primarily shaped by assimilation and deletion. In assimilation, consonants often shift to resemble adjacent sounds for ease of pronunciation, for instance, *not picky* becomes /nəp pɪki/ due to regressive assimilation. Consonants are also deleted at the end of words, a process known as apocope, as in *trust* → /trʌs/ and *brought* → /brɔː/. On the other hand, vowel alterations mostly involve deletion through aphaeresis and syncope, which remove vowels to shorten and simplify words. For example, the vowel /æ/ was dropped in *I am* to produce *I'm* (/aɪm/), and the schwa /ə/ is omitted in *probably*, resulting in /prəbli/. These changes enable vowels to be compressed or dropped entirely to match the tempo and natural rhythm of the lyrics. Overall, these phonological rules, applied to both consonants and vowels, contribute to smoother and more efficient pronunciation that suits the pace and style of the song.

Based on the results and conclusion, this research recommends the future research to utilizing another theory of phonological rules to gain a different insight. Since this study merely focuses on rap song where the lyrics have been written, the rapper's speech may be too fast. Therefore, investigating more real-world phenomena, such as utterances in daily conversations of native English speakers, such as in podcasts may be more dig to get more insights in terms of the process come from natural process without any setting.

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References

- Al-Nabhani, S., & Madiseh, F. R. (2025). a Phonological Analysis of Efl Learners' Speech: Implications for Effective Pronunciation Instruction. *Journal of Teaching English for Specific and Academic Purposes*, 13(1), 101–118.
<https://doi.org/10.22190/JTESAP250105009A>
- Amalia, V. K., & Supri, I. Z. (2024). Contractions and Phonological Process in the Album 'Mezmerize' and 'Hypnotize' By System Of A Down Bad. *English Journal Literacy Utama*, 2018, 64–72.
- Bedu, A. (2024). *Generative Approach to African linguistics and Literary Studies: A Festschrift in Honour of Professor Mohammed Munkaila* (A. M. Bedu & B. Usman (eds.)). Faculty of Arts, University of Maiduguri Occasional.
- Birjandi, P., & Salmani-Nodoushan, M. A. (2005). *An Introduction to Phonetics*. Distributed by ERIC Clearinghouse.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.
<https://books.google.co.id/books?id=s4ViswEACAAJ>
- Diani, M. (2018). *Connected Speech Aspect of Elision in the World of Our Own Album By Westlife Phonologically*. Sekolah Tinggi Ilmu Bahasa Asing - JIA.
- Firdhani, A. R., Maulia Indrayani, L., & Mahdi, S. (2018). The Use Of Consonant Elision By Sri Mulyani During Her Interview Session With The Banker. *ELTIN Journal*, 6(2), 53–58.
- Gussenhoven, C., & Jacobs, H. (2017). *Understanding Phonology*. In *Understanding Phonology* (Fourth Edition). Routledge. <https://doi.org/10.4324/9781315267982>
- Hatimah, Zannah, H., & Rosidah. (2022). English Phonological Rules in The Movie of Not Cinderella's Type (2018). *Sketch Journal: Journal of English Teaching, Literature and Linguistics*, 2(1).
- Ilxomovna, S. R., & Rustam, J. G. (2024). *Role of Phonetics in Learning English*. 228–231.
<https://doi.org/10.2024/0e47fm47>
- Kothari, C. R. (2004). *Research Methodology; Methods and Techniques* (2nd Revised Edition). New Age International.
- Lass, R. (1984). *Phonology: An Introduction to Basic Concepts*. 1–361.
- Ndaalu, A.-N. H., & Ngulube, I. E. (2024). English Phonological Operations: A Study of Rule Interactions. *International Journal of Literature, Language and Linguistics*, 7(1), 1–48. <https://doi.org/10.52589/ijlll-td0jp8vb>
- Patel, A. D., & Iversen, J. R. (2021). *Processing rhythm in speech and music: Shared mechanisms and implications for phonological restructuring*. *Frontiers in*

Psychology, 12, 678901. <https://doi.org/10.3389/fpsyg.2021.678901>

Roach, P. (2013). *English Phonetics and Phonology A practical course A practical course*.
www.cambridge.org

Skandera, P., & Burleigh, P. (2005). *A Manual of English Phonetics and Phonology*. 1–151.

Wulandari, A. A., Ketut, N. L., Indrawati, M., Made, N., & Widiastuti, A. (2023). A
Phonological Analysis Of Elision Found In SZA'S Selected Songs In 'SOS' Album.
International Journal of Linguistics and Discourse Analytics, 5(1).