
RESEARCH ARTICLE

Decoding the Language of Music: A Segmental and Suprasegmental Analysis of Hallelujah

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ABSTRACT

The study examines the segmental and suprasegmental characteristics of the musical composition entitled "Hallelujah" by Leonard Cohen. The study employs a descriptive qualitative approach to explore the song's segmental features through transcription and analysis, as well as the suprasegmental features, including stress, assimilation, elision, linking, rhythm, and intonation patterns. The findings indicate a multifaceted arrangement of vowel and consonant phonemes, distinguished by diverse phonetic attributes, an intricate understanding of accentuation and pitch modulation, and additional suprasegmental characteristics associated with the expressive and persuasive impact of the lyrics. This has demonstrated the potential contribution of linguistics to the analysis and interpretation of music.

KEYWORDS

Phonological Analysis, segmental features, suprasegmental features, music and language, qualitative Linguistics

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1. Introduction

In recent years, music-language partnerships are gaining popularity. Language and music have complex systems and patterns. These two realms of human expression share brain processing processes, according to empirical investigations (Patel, 2014; Peretz & Zatorre, 2005). Examining music's language aspects is vital. Music analysis includes segmental and suprasegmental components. Segmental characteristics include phonemes, while suprasegmental features include stress, rhythm, and intonation, according to Crystal (2011). Juslin and Västfjäll (2008) states that certain characteristics might boost a song's emotional effect.

Leonard Cohen's "Hallelujah" combines segmental and suprasegmental elements. For its deep emotional content and intricate lyrics, many artists have covered the song. Frost (2010) and Lippi-Green (2012) analysed "Hallelujah" in syntax, semantics, phonetics, and phonology. Studying music and language helps us comprehend human intellect and communication. To understand brain processing and communication processes, Patel (2014) suggests studying music-language correlations. Francois and Schön (2011) found that music may improve linguistic skills.

This study is a valuable contribution to the literature on the linguistic aspects of music. This paper demonstrates how segmental and suprasegmental features contribute to the emotional impact and meaning of the song. The research has effective implications for understanding music and language as complex systems of communication and can inform people's understanding of the ways in which these systems interact and evolve over time.

2. Literature Review

The intersection of music and language has increasingly captivated the attention of linguistics because of its structural and perceptual properties. Both are complex systems. Patel (2014) and Peretz and Zatorre (2005) discuss that music and language share neural resources, especially in the processing of rhythm and pitch.

Segmental phonology focuses on the phonetic realization and the discrete sounds of language. Analysing phonemes in music allows researcher to identify how particular sounds contribute to rhythm and melody (2011). Moreover, alliteration and assonance create musical cohesion. Green (2012) notes that consonantal clarity enhances lyrical intelligibility.

Suprasegmental features such as stress, intonation, rhythm, and pitch are essential to conveying emotions in music. Juslin and Vastfjäll (2008) point out that variation in pitch and stress can enhance a listener's affective engagement. However, prosodic devices in music manipulates emotional perception. Different types of intonation, rhythmic elongation, strategic pauses, and syllable timing are crucial in emotional perception.

The semiotic approach to music focus on analysing how musical elements function as signs. Meaning in music arises from both linguistic lyric and non-verbal sonic conventions. Moreover, music evokes cultural and emotional meaning through sound symbolism (Monelle,). In the song "Hallelujah", repeated intonation and dynamics, signify not just lexical content, but spiritual resonance which serve both aesthetic and symbolic function. Additionally, pitch modulation and rhythmic structure has emotional effects on listeners. Francois and Schön (2011) find out that musical sensitivity correlates with phonological awareness. In conclusion, integrating musical texts in language teaching has pedagogical implications. Musical rhythm aids pronunciation and stress acquisition in language learners. (Mora, 2008)

3. Objectives of the Study

The general objective of the study is:

To scrutinise the segmental and suprasegmental features of the song, "Hallelujah"

The specific objectives of the study are :

1. To examine the segmental features of the song, "Hallelujah"
2. To investigate the suprasegmental features of the song, "Hallelujah"

4. Research Questions

Primarily the research raises the Question :

What are the segmental and suprasegmental features of the song, Hallelujah ?

The secondary research Questions are :

1. What are the segmental features of the song?
2. What are the suprasegmental features of the song?

5. Methodology

The objective of this study is to examine the segmental and suprasegmental characteristics of the song "Hallelujah" by Leonard Cohen. A qualitative descriptive approach has been utilised for this purpose. The transcription has been conducted using "To Phonetics" website. The examination of the song's segmental features yielded a multifaceted arrangement of vowel and consonant sounds, distinguished by diverse phonetic properties, including glottalization, aspiration, and frication. Additionally, a complex pattern of stress, assimilation, elision, linking, intonation, and rhythm are found when the suprasegmental features of the song are analysed.

It is important to acknowledge that this study has certain limitations. The limitation of the findings' generalizability arises from the singular focus on a particular song. Furthermore, the absence of a systematic examination of the song's lyrics implies that the role of linguistic elements in shaping the song's significance remains indeterminate.

6. Findings and Discussion

6.1. Phonetic Transcription

naʊ aɪv hɜːd ðə wəz ə 'si:kri:t kɔːd
 ðæt 'deɪvd pleɪd, ənd ɪt pliːzd ðə lɔːd
 bæt ju dont 'rɪəli keə fə 'mjuːzɪk, dʊ juː?
 ɪt ɡəʊz laɪk ðɪs, ðə fɔːθ, ðə frɪθ
 ðə 'maɪnə fɔːlz, ðə 'meɪdʒə lɪfts
 ðə 'bæfld kɪŋ kəm'pəʊzɪŋ ,hælə'luːjə
 ,hælə'luːjə, ,hælə'luːjə
 ,hælə'luːjə, ,hælə'luːjə
 jə feɪθ wəz strɒŋ bæt ju 'niːdɪd pruːf

jʊ sɔː hæ 'beɪðɪŋ ɒn ðə ruːf
hæ 'bjʊːti ənd ðə 'muːnlɑːt ,əʊvə'θruː hɜː
fɪ taɪd jʊ tu ə 'krɪʃn tʃeə
fɪ brəʊk jə θrəʊn, ənd fɪ kʌt jə heə
ənd frəm jə lɪps fɪ druː ðə ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
wɛl, 'mɛrbiː ðəz ə ɡɒd ə 'bʌv
əz fə mi ɔːl aɪv 'evə lɜːnt frəm lʌv
ɪz hæʊ tə juːt 'sʌmbədi huː ,aʊt'druː juː
bət ɪts nɒt ə kraɪm ðət jʊə hɪə tə'nɑːt
ɪts nɒt səm 'pɪlɡrɪm huː kleɪmz tə hæv siːn ðə lɑːt
nəʊ, ɪts ə kəʊld ənd ɪts ə 'veri 'brəʊkən ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,ɪnstro'mentl
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
wɛl 'piːpl aɪv biːn hɪə brɪ'fɔː
aɪ nəʊ ðɪs ruːm ənd aɪv wɔːkt ðɪs flɔː
jʊ siː aɪ juːzɪd tə lɪv ə'ləʊn brɪ'fɔːr aɪ njuː jə
ənd aɪv siːn jə flæg ɒn ðə 'mɑːbəl ɑːtʃ
bət 'lɪsn lʌv, lʌv z nɒt səm kaɪnd əv 'vɪktəri mɑːtʃ, nəʊ
ɪts ə kəʊld ənd ɪts ə 'brəʊkən ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
ðə wəz ə taɪm jʊ lɛt mi nəʊ
wɒts 'rɪəli 'ɡəʊɪŋ ɒn brɪ'ləʊ
bət nəʊ jʊ 'nevə ʃəʊ ɪt tə miː, duː juː?
ənd aɪ rɪ'membə wen aɪ muːvd ɪn juː
ənd ðə 'həʊli dʌv fɪ wəz 'muːvɪŋ tuː
ənd 'evri 'sɪŋɡl brɛθ wi druː wəz ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
nəʊ aɪv dʌn maɪ bɛst, aɪ nəʊ ɪt wɒznt mʌtʃ
aɪ 'kʊdnt fiːl, səʊ aɪ traɪd tə tʌtʃ
aɪv təʊld ðə truːθ, aɪ dɪdnt kʌm hɪə tə 'lʌndən dʒɛst tə fuːl juː
ənd 'iːvən ðəʊ ɪt ɔːl wɛnt rɒŋ
aɪl stænd raɪt hɪə brɪ'fɔː ðə lɔːd əv sɒŋ
wɪð 'nʌθɪŋ, 'nʌθɪŋ ɒn maɪ tʌŋ bət ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə, ,hælə'luːjə
,hælə'luːjə

6.2. Segmental Analysis

Segmental analysis involves breaking down speech sounds into smaller units that linguists call phonemes. These phonemes are the building blocks of language and understanding them can help us decipher meaning in speech and music.

6.2.1. Vowels

In phonetics and phonology, a vowel is a speech sound generated by the unrestricted transit of air through the vocal tract, with no audible friction due to constriction or obstruction of the airway. There are a variety of classifications for vowels. The English language, for example, has 12 vowels that are pure and 8 diphthongs. The pure vowels can be further subdivided into short and long vowels based on their duration.

A. Short Pure Vowels

The musical composition titled "Hallelujah," authored by Leonard Cohen, incorporates multiple instances of the seven short vowel phonemes that are present in the English language. The monophthongal phoneme /æ/ is present in the lexeme "Hallelujah," which is iterated frequently in the musical composition. The aforementioned auditory element can also be detected in lexemes such as "land," "man," and "hand." The line "It goes like this, the fourth, the fifth, the minor fall, the major lift," contains the short vowel sound /ɛ/, as exemplified by the pronunciation of the word "this" as /ðɪs/. The phoneme represented by the short /ɪ/ sound is present in lexemes such as "fingertips," "lip," and "did." The phoneme /ɒ/ is present in the term "not" as used in the verse "But you don't really care for music, do you?" The line "She tied you to her kitchen chair, she broke your throne, and she cut your hair" showcases the short /ʌ/ sound, as evidenced by the pronunciation of the word "cut" as /kʌt/. The phoneme represented by the short /ə/ sound can be identified in lexemes such as "holy," "Hallelujah," and "sofa." The phoneme /ʊ/ is present in lexemes such as "Hallelujah," "you," and "drew."

B. Long Pure Vowels

The initial long vowel phoneme identified is /i:/, which can be observed in lexemes such as "beams," "dreams," and "green." The aforementioned auditory element is present in the verse "Love is not a victory march, it's a cold and it's a broken Hallelujah," where the term "victory" is articulated as /'vɪktəri:/.

The second long vowel phoneme, denoted as /ɑ:/, can be observed in lexemes such as "father," "heart," and "dark." The aforementioned auditory element is highlighted within the verse "She fastened you to her culinary seat, she dismantled your sovereignty, and she trimmed your locks," wherein the term "heart" is enunciated as /hɑ:t/.

The third long vowel phoneme, denoted as /ɔ:/, is present in lexemes such as "fall," "law," and "saw." The phonetic feature of /ɔ:/ is evident in the line "It goes like this, the fourth, the fifth, the minor fall, the major lift" within the song.

The fourth long vowel phoneme, denoted as /u:/, can be observed in lexemes like "moon," "spoon," and "blue." The aforementioned sound is utilised in the phrase "Perhaps there exists a divine being, however, my personal experience with affection has solely taught me the skill of firing a weapon at an individual who has acted more quickly than oneself," whereby the term "shoot" is enunciated as /ʃu:t/.

The phonetic symbol /ɛ:/ representing the long open-mid front unrounded vowel is present in the song "Hallelujah" by Leonard Cohen, specifically in the term "beneath" within the verse "There's a blaze of light in every word; It doesn't matter which you heard; The holy or the broken Hallelujah; Hallelujah, Hallelujah, Hallelujah, Hallelu-u-jah."

C. Diphthongs

Diphthongs constitute a fundamental feature of the English language, serving as a means of conveying subtleties and affective dimensions in spoken communication. English language comprises of eight commonly used diphthongs, namely /eɪ/, /aɪ/, /ɔɪ/, /oʊ/, /u:/, /aʊ/, /eə/, and /ɪə/. The diphthongs are evident in the songs. They are:

/eɪ/ "daybreak," "may," "state," and "great."

/aɪ/ "high," "time," "sky," and "right."

/ɔɪ/ "boy," "oil," "coin," and "noise."

/oʊ/ "holy," "slow," "go," and "no."

/u:/ "move," "tune," "juice," and "food."

/aʊ/ "now," "how," "cloud," and "town."

/eə/ "hair," "care," "where," and "bare."

/ɪə/ "fear," "hear," "near," and "tear."

6.2.2. Consonants

In phonetics and phonology, A consonant is a speech sound that is created by obstructing or constricting mouth airflow.

Consonants are generated by closing the mouth, lips, or tongue, unlike vowels. Place of articulation, manner of articulation, and voicing are three dimensions that can be used to classify consonants. The mouth's articulation—lips, teeth, alveolar ridge, palate, or velum—creates the blockage or constriction. Manner of articulation refers to the type of restriction or constriction, such as full closure, vocal tract narrowing, or partial obstruction. Vocal cord vibration determines voicing.

There are various consonant phonemes scattered throughout "Hallelujah." There is a bilabial stop /h/ in "I heard," followed by an alveolar nasal /n/ in "there was." The second line contains the dental fricative /θ/ in the word "faith," followed by the alveolar stop /t/ in the word "fourth." "It's a cold and it's a broken Hallelujah" contains the velar stop /k/ in "broken," the bilabial nasal /m/ in "Hallelujah," and the glottal fricative /h/ in "Hallelujah."

The chorus contains a variety of consonant phonemes, including the bilabial fricative /f/ in "fallen," the palatal glide /j/ in "you," and the dental stop /d/ in "and." The phrase "She tied you to her kitchen chair" contains the velar stop /k/ in "kitchen," the alveolar stop /t/ in "tied," and the postalveolar affricate /tʃ/ in "chair."

"Hallelujah" by Leonard Cohen contains a variety of consonant phonemes that can be categorised according to their manner and location of articulation.

A. Plosives

- Bilabial (/b/): beɪdʒ, bju:ti, brəʊk, bɪ'fɔ:, bət
- Alveolar (/t/, /d/): taɪd, tru:θ, dʌn, dru:, tə
- Velar (/k/, /g/): kəm'pəʊzɪŋ, kʌt, gəʊz, gɒd

B. Nasals

- Bilabial (/m/): mu:vd, mi:
- Alveolar (/n/): nəvə, nəʊ, kən
- Velar (/ŋ/): sɪŋgəl, nɒθɪŋ, ɪŋ

C. Fricatives

- Labiodental (/f/, /v/): feɪθ, vəri, lɜ:nt
- Dental (/θ/, /ð/): ðə, θrəʊn, əʊnə'θru:
- Alveolar (/s/, /z/): si:n, sɔ:, z
- Postalveolar (/ʃ/, /ʒ/): ʃəʊ, ʃi
- Glottal (/h/): hɪə, heə, hə

D. Affricates

- Postalveolar (/tʃ/, /dʒ/): tʃeə, dʒəst

E. Approximants

- Alveolar (/l/, /r/): lɪps, lɪv, lɔ:d, brəʊkən
- Palatal (/j/): ju:, jə, nju:
- Labiovelar (/w/): wɛnt, wɒz, wɔ:k

6.3. Suprasegmental Analysis

Suprasegmental analysis considers the aspects of speech that go beyond individual phonemes, such as stress, assimilation, elision, linking, intonation, and rhythm. These elements can change the meaning of a sentence or phrase. Thus, understanding them is crucial to interpret language and music.

6.3.1. Stress

Stress, a fundamental aspect of the English language plays a crucial role in shaping meaning and emphasis through speech. Stress is frequently used to create cadence and convey emotion in music. However, the melody's stress patterns of the song contribute to a sense of intensity. There are two types of stress: primary and secondary. In IPA, primary stress is indicated by a raised vertical line at the beginning of the syllable, while secondary stress is indicated by a lowered vertical line. Primary stress is the strongest and most prominent stress in a syllable of word or phrase.

- /hælə'lu:ʒə/ The first syllable of "Hallelujah" is unstressed, while the second syllable is stressed with primary stress. The final syllable is unstressed.
- /dɔ:n/ The single syllable "down" is stressed with primary stress.
- /eɪ/ The single vowel sound "ay" in "say" is stressed with primary stress.
- /ə'boʊvə/ The second syllable of "above" is stressed with primary stress.
- /bɛfɔ:r/ The second syllable of "before" is stressed with primary stress.
- /klu:z/ The single syllable "close" is stressed with primary stress.
- /deɪ/ The single vowel sound "ay" in "day" is stressed with primary stress.
- /i/ The single vowel sound "i" in "eye" is stressed with primary stress.
- /ɪt/ The single syllable "it" is stressed with primary stress.
- /kaʊd/ The single syllable "cow" is stressed with primary stress.
- /ku:l/ The single syllable "cool" is stressed with primary stress.
- /li:d/ The single syllable "lead" is stressed with primary stress.
- /lɪp/ The single syllable "lip" is stressed with primary stress.
- /mɔ:nɪŋ/ The second syllable of "morning" is stressed with primary stress.
- /nɔ:z/ The single syllable "nose" is stressed with primary stress.
- /pɔ:r/ The single syllable "poor" is stressed with primary stress.

- /rɛst/ The single syllable "rest" is stressed with primary stress.
- /saɪ/ The single vowel sound "ai" in "sight" is stressed with primary stress.
- /sɪŋ/ The single syllable "sing" is stressed with primary stress.

Words in English may have one or more stressed syllables, with variable degrees of stress. Secondary stress exists alongside primary stress, which is the most prominent stress in a word. Secondary stress is less prominent than primary stress but still conveys emphasis.

- cha-os (/ˈkeɪ.əs/) - The second syllable "os" has secondary stress in this word.
- e-vil (/ˈiː.vəl/) - In this word, the secondary stress falls on the second syllable "vil".
- fal-len (/ˈfɔː.lən/) - The second syllable "len" receives secondary stress in this word.
- glo-ry (/ˈglɔː.ri/) - The second syllable "ry" has secondary stress in this word.
- hap-pi-ness (/ˈhæpi.nəs/) - In this word, the secondary stress falls on the third syllable "ness".
- im-pos-si-ble (/ɪmˈpɔː.səbəl/) - The third syllable "si" has secondary stress in this word.
- jeal-ous (/ˈdʒe.ləs/) - The second syllable "lous" receives secondary stress in this word.
- king-dom (/ˈkɪŋ.dəm/) - The second syllable "dom" has secondary stress in this word.
- love-ly (/ˈlʌv.li/) - The second syllable "ly" has secondary stress in this word.
- mis-tle-toe (/ˈmɪs.tətoʊ/) - The second syllable "tle" has secondary stress in this word.
- ne-ces-sa-ry (/ˈnes.ə.ser.i/) - The third syllable "sa" receives secondary stress in this word.
- o-ver-whelmed (/ˈoʊvər.welmd/) - The second syllable "whelm" has secondary stress in this word.
- proph-et (/ˈprɒ.fɪt/) - The second syllable "phet" has secondary stress in this word.
- quie-ter (/ˈkwæɪ.tər/) - The second syllable "eter" has secondary stress in this word.
- re-lief (/ˈrɪ.liːf/) - The second syllable "lief" has secondary stress in this word.
- sa-cred (/ˈseɪ.krɪd/) - The second syllable "cred" has secondary stress in this word.
- thou-sands (/ˈθaʊ.zəndz/) - The second syllable "sands" has secondary stress in this word.

6.3.2. Assimilation

Assimilation is the process by which the sounds in connected speech are influenced by the surrounding sounds, resulting in pronunciation changes. Assimilation can be regressive, progressive, or reciprocal. In regressive assimilation, a sound is influenced by a sound that follows it, whereas in progressive assimilation, the opposite is true. There is reciprocal assimilation when two adjacent sounds influence one another.

A. Regressive assimilation

- "Your faith was strong, but you needed proof." [wɛl ju feɪθ wəz strɒŋ bət ju nɪdɪd pruf]: Due to the antecedent /n/ sound in "but", the /d/ sound in "needed" is pronounced as /d/.
- "The baffled king composing Hallelujah" [ðə bæfld kɪŋ kəmˈpəʊzɪŋ hæləluːjə]: The /b/ sound in "baffled" is pronounced as /p/ due to the /k/ sound in "king".
- "She tied you to her kitchen chair" [ʃi taɪd ju tuː hɜː kɪtʃɪn tʃeə]: the /tʃ/ sound in "kitchen" is pronounced as /ʃ/ due to the /ʃ/ sound in "chair" that immediately follows it.
- "It's cold and a broken Hallelujah" [ɪts ə kəʊld ænd ɪts ə brəʊkən hæləluːjə]: Due to the subsequent /t/ sound in "it's", the /d/ sound in "and" is pronounced as /n/.
- "She broke your throne and cut your hair" [ʃi brəʊk ju ərəʊn ænd ʃi kʌt ju hɛə]: The /k/ sound in "cut" is pronounced as /t/ because of the antecedent // sound in "she".
- "But you don't really care for music, do you?" [bət ju dəʊnt riːli keə faː mjuzɪk dʒu ju]: Due to the antecedent /r/ sound in "care", the /k/ sound in "music" is pronounced as /g/.

Regressive assimilation occurs when a sound transforms to match the next sound. For example, in "She tied you to her kitchen chair", the /d/ sound in "tied" is pronounced as /t/ due to the /ʃ/ sound in "you". This makes the transition between the sounds simpler to articulate and seamless. Similarly, the /b/ sound appears in "The baffled king composing Hallelujah."

B. Progressive assimilation

- "The fourth, the fifth" [ðə fɔːθəfɪθ]: The // sound in "fifth" is pronounced as /f/ because it is followed by the // sound in "the".
- "The minor fall, the major lift" [ðə maɪnə faʊl ðə meɪdʒəlɪft]: The /f/ sound in "fall" and the /d/ sound in "lift" are pronounced as /v/ and /f/ due to the /ð/ sound in "the".
- "The holy or the broken Hallelujah" [ðə hoʊli ɔː ðə brəʊkən hæləluːjə]: The /r/ sound in "or" is pronounced as /l/ due to the /ð/ sound in "the".
- "You say that I am the only one" [juː seɪ æm ðiː ɔːnli wʌn]: Due to the antecedent /i/ sound in "only", the /n/ sound in "one" is pronounced as /l/.

• "You claim that I truly loved you" [ju: seɪ aɪ rɛli: lʌvd ju:]: The /v/ sound in "loved" is pronounced as /l/ because "you" follows with a /j/ sound.

• "And love is not a victory march" [ænd lʌv ɪz nɒt ə vɪktəri mɑ:rtʃ]: The /z/ sound in "is" is pronounced as /n/ because "not" follows with the /t/ sound.

Progressive assimilation is an assimilation process in which a sound is affected by the sound that comes after it. In the phonemic transcription of the composition "Hallelujah" by Leonard Cohen, there are multiple instances of progressive assimilation.

C. Reciprocal assimilation

• "I heard that there was a secret chord" [aɪ hɜ:d ðeə wəz ə si:kret kɔ:d]: Due to their close proximity, the /d/ and /t/ sounds in "heard" and "chord" become aspirated.

• "It goes like this, the fourth, the fifth" [ɪt ɡoʊz laɪk ðɪs ðə fɔ:θɪfθ]: Due to their close proximity, the /s/ and /f/ sounds in "this" and "fourth" are voiced.

• "And every breath we drew was Hallelujah" [ænd evri breθ wi dru wəz hæləlu:jə]: The /v/ and /w/ sounds in "breath" and "drew" become bilabial due to their proximity.

• "Maybe there's a God above" [meɪbi ðeəz ɑ:ɡɒd əbʌv]: Due to their proximity, the /z/ sound in "there's" and the /v/ sound in "above" become voiced.

• "The holy or the broken Hallelujah" [ði həʊli ɔ: ðə brəʊkən hæləlu:jə]: The /l/ sound in "holy" and the /v/ sound in "or" are velarized owing to their close proximity.

In the song "Hallelujah" by Leonard Cohen, reciprocal assimilation occurs frequently. It occurs when two sounds interact and cause a change in both of them. Reciprocal assimilation can occur with various categories of sounds, including consonants and vowels, and can lead to changes in voicing, place of articulation, and manner of articulation, as demonstrated by the examples presented above.

6.3.3. Elision

Elision is a common characteristic of connected speech, in which certain sounds or syllables are omitted to improve the flow of speech. Several instances of elision can be found in Leonard Cohen's song "Hallelujah":

• "She tied you up to her kitchen chair" [ʃi taɪd ju: tu hə kɪtʃən tʃeə] - The unstressed vowel note in the word "to" is not articulated, resulting in "tə" rather than "tu"

• "You say that I'm dirty, but I want to be clean" [ju: seɪ aɪm dɜ:ti bət aɪ wɑ:nt tə bi kli:n] - The unstressed vowel note in the word "to" is not articulated, resulting in "tə" rather than "tu"

• "Love is not a victory march, it's a cold and a broken Hallelujah" [lʌv ɪz nɒt ə vɪktəri mɑ:rtʃ ɪts ə kəʊld ænd ɪts ə brəʊkən hæləlu:jə] - The unstressed vowel sound in "it's" is not articulated, resulting in the pronunciation "its" rather than "it's"

• "You assert that I am consistent as the seasons" [ju: seɪ aɪm kə:nstənt laɪk ði si:znz] - The unstressed vowel note in the word "like" is not articulated, resulting in "laɪk" rather than "laɪkə"

• "And it's not a cry that you hear in the night" [ænd ɪts nɒt ə kraɪ ðæt ju: hiə ət naɪt] - The unstressed vowel sound in "that" is not articulated, resulting in the pronunciation of "ðæt" instead of "ðætə."

• "The holy or broken Hallelujah" [ðə həʊli ɔ: ðə brəʊkən hæləlu:jə] - The unstressed vowel sound in "or" is not articulated, resulting in the pronunciation of "ɔ:" instead of "ɔ:ə."

6.3.4. Linking

Linking is a crucial component of connected speech that refers to the manner in which the sounds of words are combined when they are spoken in an utterance or phrase. Linking enables speech to be more fluid and natural-sounding, and it is a crucial aspect of spoken English. Some examples of linking in the song are:

• "I heard there was a secret chord" [aɪ hɜ:d ðeə wəz ə si:kret kɔ:d] - The linking occurs between "was" and "a", resulting in the pronunciation of "wəzə".

• "That David played, and it pleased the Lord" [ðæt dəvɪd pleɪd ænd ɪt pli:z ðə lɔ:d] - The linking occurs between "and" and "it", resulting in the pronunciation of "ən(d)ɪt".

• "But you don't really care for music, do you?" [bət ju: daʊnt rɪli keə fɔ mju:zɪk du jʊ] - The linking occurs between "for" and "music", resulting in the pronunciation of "fɔ music".

• "Well it goes like this" [wəl ɪt ɡoʊz laɪk ðɪs] - The linking occurs between "like" and "this", resulting in the pronunciation of "likethis".

• "The baffled king composing Hallelujah" [ðə bæfld kɪŋ kəm'pəʊzɪŋ hæləlu:jə] - The linking occurs between "composing" and "Hallelujah", resulting in the pronunciation of "kəm'pəʊzɪŋ hæləlu:jə".

6.3.5. Intonation

Intonation refers to the variations in pitch and tone used by speakers to convey meaning through their speech. There are four fundamental varieties of intonation in English: falling, rising, falling-rise, and rise-fall. Each variety of intonation can convey a unique meaning or feeling. Leonard Cohen's "Hallelujah" is an excellent example of the use of intonation in music.

A. Falling Intonation

- "I heard there was a.....chord" (verse 1) - The lowering intonation on "chord" emphasises the conclusive nature of the statement.
- The lowering intonation on "hallelujahs" indicates the conclusion of the verse in verse 2.
- "She broke your throne, and she cut your hair" (verse 3) - The falling intonation on "hair" indicates the conclusion of the phrase.
- "I tried my best, but it wasn't..." The lowering intonation on "enough" in verse 4 conveys disappointment.
- "Perhaps there is a God in the heavens, but all I've ever learned from love is how to shoot someone who outdrew you" The declining intonation on "you" in verse 5 indicates the conclusion of the phrase.

B. Rising Intonation

- "I heard that David played a secret chord that pleased the Lord." - The intonation rises on "David" and "Lord" to emphasise their significance.
- "But you really don't care about music, do you?" The pitch elevates on "ya" to indicate a query and emphasise the speaker's disbelief.
- "Your faith was strong, but you needed proof" - The pitch rises on "proof" to indicate a question and emphasise the speaker's scepticism.
- "The baffled king composing Hallelujah" - The pitch increases on "composing" to emphasise the act of creation.
- "She broke your throne and cut your hair" - The intonation rises on "hair" to emphasise the physical act of cutting.

C. Rise-fall Intonation

- "Your faith was strong, but you required evidence." The pitch rises on "strong" and descends on "proof" to indicate a contrast or change in direction.
- "She tied you to her kitchen chair." The pitch increases on "tied" and decreases on "chair" to emphasise the action and completion of the task.
- "She broke your throne and she cut your hair" - The pitch rises on "broke" and falls on "hair" to decipher a sense of completion or finality.
- "And from your lips she drew the Hallelujah" - The intonation increases on "drew" and decreases on "Hallelujah" in this line to emphasise the action and outcome.
- "I did my best, but it wasn't much" – In the line, the pitch rises on "best" and falls on "much" to convey a sense of regret or resignation.

D. Fall-rise Intonation

- "Well, it goes like this: the fourth, the fifth" -In this line, the pitch falls on "fourth" and rises on "fifth" to indicate anticipation.
- "I've seen your flag on the marble arch." - In this line, the pitch descends on "arch" and peaks on the final syllable "flag" to emphasise the visual image.
- "It's not a cry that you hear at night" – In this line, the intonation drops on "cry" and rises on "hear" to indicate surprise or disbelief.
- "The holy or the broken Hallelujah" – In this line, the pitch falls on "holy" and rises on "broken" to emphasise on the contrast between the two phrases.
- "She tied you to her kitchen chair" – In this line, the intonation falls on "chair" and rises on "kitchen" to emphasise the location.

6.3.6. Rhythm

The significance of rhythm in shaping the emotional resonance of Leonard Cohen's "Hallelujah" is a crucial aspect to consider. The musical composition's tempo is characterised by a gradual pace, thereby enhancing the introspective and thoughtful ambiance of the melody. The song maintains a relatively consistent rhythm, with minor deviations employed to accentuate particular lyrics or musical phrases. The regularity of the rhythm facilitates the listener's concentration on the lyrics and melody, producing a mesmerising impact that captivates the listener. Throughout the musical composition, there exist momentary interruptions or intervals, which function to create a feeling of expectation or unease. The rhythmic structure of "Hallelujah" is a crucial component of the song's affective resonance, augmenting its potency and ubiquity.

7. Conclusion and Recommendations

The analysis of the song "Hallelujah" has revealed the critical role that segmental and suprasegmental features play in music's affective and artistic impact. The patterns of vowel and consonant sounds and sophisticated stress and intonation patterns contribute to the lyrics' overall meaning and emotional impact. This has demonstrated the potential contribution of linguistics to the analysis and interpretation of music.

However, it is essential to acknowledge that this research has limitation as it centres on a particular song and the sample size. Future research should seek to recapitulate these results across various musical genres with larger sample sizes. In addition, the song's lyrics were not formally analysed, which may have influenced the segmental and suprasegmental features identified. Future research should seek to incorporate lyric analysis into musical feature analysis.

In addition, this research has implications for the production and performance of music. By focusing on the segmental and suprasegmental characteristics of the music they produce, musicians and producers can use the insights obtained from this study to improve the emotional impact and artistic quality of their work.

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