# TEACHING MUSICALITY OF LANGUAGE THROUGH IMPRESSIONISTIC TRANSCRIPTION OF A PRODUCT-MIX OF SEGMENTAL AND SUPRASEGMENTAL ASPECTS OF SPEECH

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## Abstract

*Speech and music seem to be human specific traits reflecting evolutionary story of our cognitive development and this paper in a limited sense tries finding their fusional properties in the term musicality of speech. Moreover, there is a need to understand speech and its components closely in order to trace its musicality factor, and impressionistic transcription encourages and takes into account impressions of sound unaided by technology. Musicality of speech is not something so much of an easily transferable concrete piece of knowledge but an abstract entity composed of conscious awareness about multiple sub-skills which learners have to assimilate for themselves. Teacher needs to develop a self belief in learner to look for autonomy suggesting them to step forward on the path of heuristic learning on their own. This paper raises an emergent issue of musicality of language, the often neglected component of speech, as an integral component of gaining fluency, flair, competence, command, and proficiency in this expectant world of professional expertise. The study will investigate into segmental-supersegmental impact onto speech to make it more synchronized lyrically and will also present interesting specific activities targeting conceptual as well practical awareness about actual usage of musical components in everyday expressions.*

*Keywords- Impressionistic Transcription, Loudness, Musicality of Speech, Pitch, Segmental, Suprasegmentals.*

## I. INTRODUCTORY AWARENESS OF THE TOPIC

Human species specific gift of language is one of the most complex-to-unravel modes of communication which uses numerous kinds of tools both concrete as well as abstract to carry out its innate function well. The way we express ourselves in a language, in many different ways, decides what opinion people will make about us. This reflects an oversimplified notion that apart from choice of words and framing of the sentences there are many more decisive elements deciding which notion we generate in our listener. This extraneous meaning ability of speech is intimately, intricately and innately linked with our feelings about our own selves: our degree of self esteem, our sense of individuality, and our state of mind at a given moment of time. Maintaining musicality in

language necessitates the language user to display ease of use over both segmental and suprasegmental aspects, where segmentals like consonants and vowels are those which form the primary sound framework of a language and on the other hand suprasegmentals like pitch, duration, loudness, stress, and pauses are those features which extend over more than one segment.

Rhythmic musicality triggered by suprasegmental is an integral part of spoken aspect of language, which not only affects an individual utterance but also impacts the structure and meaning of discourse. Learning to know about the composition of musical attributes is one stage in mastering the language and able to visualize as well as transcribe the same is the next level. Here in this scenario impressionistic transcription is quite a handy tool to appreciate the distinctive use of language for more meaning fulfillment. And this impressionistic transcription is possible only once one has not only acquired but nurtured as well, a sense in identifying unique features of sounds, ability to differentiate between some similar features of sounds, and finally be able to reproduce with certain amount of qualified exactitude a range of speech sounds of English Alphabet. The effort of this kind of speech analysis looks for a teacher's role to equip student with "a deep, internally experienced awareness of what is going on within the vocal tract – an ability to analyse, and hence describe and ultimately control, the postures and movements of organs that produce the sounds of speech" (Catford 2).

Despite ever too known settled understanding about the importance of learning and mastering musicality of language, almost all our courses more or less remain confined to teach and talk about pronunciation at the most, seldom consider about teaching musicality through making students aware about role of suprasegmentals to say the least. This paper suggests an outline of the manner in which suprasegmentals not only introduce components of musicality in the speech but also structure spoken aspect of language, convey all kinds of meaning, and conveniently complete interaction.

## II. EXPLICATORY DEFENSE OF THE TITLE AND TERMINOLOGIES

There has been strong evidential support about evolutionary theories suggesting about music and speech having a common origin in the form of an early communication system based on exhaustive vocalizations and gestural movements (Mithen) and that musically exaggerated intonations may have played a critical role in social interaction and communication, especially between the mother and the infant (Trehub). Another view holds that the development of music can be understood more as a by-product of other adaptive functions related to, for example, language, and emotion (Pinker). It has also been proposed that the musical aspects of language act as scaffolding tool for attaining more clarity and dexterity in use of the semantic and syntactic aspects of language (Brandt et al.).

A cursory analysis of human speech will always suggest that it cannot be plainly described as sequences composed of language units like phonemes, syllables, or words which are linearly joined. And these phonemes which do not carry any inherent meaning are the smallest element of phonological structure. When a learner listens to a single English word, there is no issue of listening misperception but when it is a part of connected speech there are chances that the same word may not be picked up correctly. In this everyday scenario, whether

it is classroom or any social environment of speech instance there comes into play those phonological features which have their overarching presence spread over multiple segments and are thus called as suprasegmentals. In fact even a straight forward simple impressionistic analysis will easily reveal that there are those suprasegmental elements which provide "recognizable melodical properties" (Noteboom 640) to speech all the time. This paper looks into the aspect of clearing erroneous ideas already formed about seeing pronunciation and musicality as two synonymous entities whereas linguistically speaking pronunciation relates to segmental accuracy quite contrary to musicality which looks for synchronized effort between segmental and suprasegmental components of speech.

## 2.1 Background of Musicality Factor of Speech

There are different approaches to the study of musical attributes in the speech as it is driven not only by different theories of language and human interaction, but also by different targets kept in the mind. Initial studies focused on visualizing speech as a performance in order to carry out performative acts, like a leader needed to display ample amount of rhetorical skills in order to urge and sway audience to whatever decision which had been taken whether during war or peace time period, the evocative messages delivered in the Church to follow a professed divine path, or the theatrical performances to charm the audience. Here the speech was seen as an art where artist is needed to master all its sub skills of making right connect and desired impact on the listener, this all focused on modulatory swings seesawing with variety of emotions.

Concept of musicality in language situates itself on "communicative competence", a term introduced in 1970s as explanatory idea to Chomskian discursive initiation into competence-performance concept, which lead to shaping new formulations for English Language Teaching classroom efforts by many researchers (Habermas; Hymes; Savignon) while elaborating the psycholinguistic dimension as well as role of socio-cultural dimensions in language acquisition. This communicative centric notion of language use takes us towards the musicality of native language user where it exhibits some of the language universals of expressing meaningful speech with variety of synchronized suprasegmental variations. These universal expressions, like facial gestures of raised eyebrows; widening or narrowing of eyes; smiling in between speech; shuddering of shoulders; moving hands in various ways, are somewhat inherently iconic which move across languages and are almost evenly found.

Melodic properties of speech communicate points of emphasis and also establish clear relationship between ideas expressed in order to make it convenient for audience to make correct sense of the speaker's meaning. English language learners in early stages is often riddled with performance pressures especially when speaking task are to be carried in front of the class, thus in this peculiar type of situational circumstances learner forgets about his prime responsibility of making his listener follow his message meaning. In fact learner remains preoccupied with worries of grammar correctness, choice of vocabulary, or overcoming anxieties.

One aspect of musicality in speech means that like musical notes one can perform grouping function, or clustering of words, or stress marking for prominence in speech too for the basis of performing a specific speech function. Phonetically explaining there are some speech components like variable pitch contours, change in

individual phoneme's inherent duration, inflected fluctuations in loudness, placement of stress, and occurrence of aperiodic filled pauses which are suprasegmental in nature as their reach spans over multiple segments of individual sound, or syllable, or word, or phrase or at times a sentence. This kind of articulatory "strengthenings" (Keating 171), which was measured using electropalatography, showed that there is a conscious effort to superimpose contextual expression to a speech act and many of ways are already acknowledge as universal characteristics of interlacing rhythmic melody. This paper pitches for a pedagogical focus to train non native speakers of language to display naturalness in their speech.

## 2.2 Segmental Phonemes

According to Longman Dictionary of Language Teaching and Applied Linguistic (Richard, Schmidt 514), segmental phonemes are the vowels and consonants of a language. Phonetically describing this English phonemic unit of consonant and vowel is the smallest segment of a sound form that has the ability to change the meaning and this can very well be confirmed by applying minimal pair test. In contrast to these isolated instances of phonemes, actual everyday speech has its own characteristic trait of showing continuous modifications in suprasegmental components, which "typically extends over more than one sound segment in an utterance" (Chun 3). Though phonemes do not have any inherent meaning by itself, except when few of them are used as filled pauses like /m/, /ɜ :/,/ ə /, /ʃ / etc., but when phonemes start coming they form meaningful units of words. For example, if you say the word "research", you will hear that there are five sound units, or phonemes, in that word: /r/ /ɪ / /s/ /ɜ :/ /tʃ /. In English there are 44 phonemes (24 consonants and 20 vowels) for 26 letters of English Alphabet.

## 2.3 Suprasegmentals and its Components

Suprasegmental is a term often used interchangeably with some of the other terms like prosody, speech melody and rhythm of speech. According to Longman Dictionary of Language Teaching and Applied Linguistic (Richard, Schmidt 574), suprasegmental is a unit which extends over more than one sound in an utterance. Similarly, Ladefoged describes suprasegmental features as "those aspects of speech that involve more than single consonants or vowels" (243). And this is also a very natural aspect of human communication, as in many ways we are biologically fine tuned to communicate while using an elaborate vocal structure which is quite efficient at creating an array of sounds. The position of larynx and various sound assisting cavities help us to make it physiologically possible as it allows us not only the pharyngeal cavity but oral, nasal, oro-nasal, and also oro-labial cavity. And these vocal folds allow extreme amount of flexibility for producing versatile range of vocal manipulations. Structurally starting from the feature levels of the sounds to individual unique sounds which further are strung in formations of morphemes, the next step that comes is of stringing these meaning units in a syntactical order giving an expression of thought on semantic as well as pragmatic planes. Physiologically, when an utterance is made, vocal organs are set in place to produce the sound formations that correspond to the abstract language elements. Here these suprasegmentals are truly a conscious effort in making an addition to the dimensions of meaning by the user which are in many ways acknowledged as universally available aspect of spoken language use across the human languages of the world.

The primary members of suprasegmentals are positioning of stress, variations in length, fluctuating pitch patterns and filler pauses. Clark, Yallop and Fletcher describe suprasegmentals as prosodic features or nonsegmental features indicating that they extend their presence over the segments in syllables, words, phrases, sentences, and discourse. In this generation process the speaker does not merely articulate the successive segmental speech sounds that make up an utterance, but does bring into context suprasegmental components like pitch, loudness, length, stress, filled pauses, or paralinguistic features. These features do help listener to know about that new piece of information and also the relationship between both new and old ideas. These laced over variations not only have effect on articulatory aspect of speech segments but also superimposes a musical component over longer stretches of utterance. This product mix of segmental-suprsegmental **"**adds an expressive dimension to the communication process: by modifying the prosodic features the speaker can supplement his utterance with elements of meaning that are not explicitly contained in its lexical and syntactic make-up" ('t Hart et al. 1).

### 2.3.1 Variable Pitch Contours

Phonetically explaining pitch is a result of a physiological action of the vibration of the vocal cords situated within the larynx, whereas phonologically speaking though it is somewhat fixed for each of the sound but special reference of pitch comes with reference to overlaying of meaning it brings to the speech. On the other hand, acoustically speaking its is known as fundamental frequency or F0 of the sound wave created at glottis, which is measured in hertz (Hz) or also known as cycles per second. Now here comes the important stage of perception of pitch by listener where extra amount of sub-glottal pressure creates an impact on how loudness and duration is received. This perception is played out in the listener mind as pitch contours in a connected speech rather than just discreet units as any of these: rising, falling, rise-fall, fall-rise, or neutral pitch variations. Intonation of a sentence is an extension of changes in pitch pattern over a comparatively larger cluster of words beyond phrase level.

There are certain well established functions of intonation patterns in English language like, a falling intonation is seen as indicative of a statement sentence or of authoritative sentence, or asking a wh- question seeking information, or is seen as meditatively looking backwards, or suggesting completion of meaning; a rising intonation suggests a question sentence or having futuristic meaning; neutral intonation suggests selective formal speech event where utmost care is given to avoid any ambiguity or expressing thoughts reflectively; fall-rise intonation suggests moments where we still want to add something more to the piece of information, or when there is a doubt in speakers mind; and rise-fall intonation suggests expressions offering choices, or reading out lists of items or anything else.

### 2.3.2 Affected Duration

International Phonetic Alphabet relates each sound of English language to some kind of intrinsically linked duration on the reasons based on its articulation, but it varies in an utterance for various linguistic and non linguistic reasons. For this paper we are concerned about the musical orientation to length variations on a

phoneme level, which is linked with the phonological-semantic-pragmatic context and also represent a reflection of impact of other suprasegmental characteristics. Phonetically explaining length refers to the physiological duration of an individual sound, whereas phonologically speaking it comes into role of bringing prominence to the stretch of sound where it superimposes itself on the segmental component of speech. On the other hand, acoustically it is the measurement for the duration of sound in milliseconds (ms). This contrastive use of length overlaid on segmental components will bring additional meanings and prominence to that stretch of speech. This paper not only underlines the importance but also the specific instances of meaningful musical variations in length introduced in the speech.

### 2.3.3 Manipulated Loudness

Phonetically explaining it refers to the extra amount of subglottal pressure exerted on a sound or a stretch of sounds, whereas phonologically it brings contrast, puts focus or entails prominence where it superimposes itself on the segmental component of speech. On the other hand, acoustically it is the measurement of intensity with which sound is produced which is measured in decibels (dB). Presence of variations in loudness is an essential part of the connected speech as it refers to the relative prominence placed on a particular syllable of the word, or particular word, or particular stretch of words representing a thoughtful action because of semantic-pragmatic sense in the speaker's mind. The variation in loudness brings distinguishing contrast by introducing emphasis and prominence in perception to that stretch of speech. This paper takes manipulation in loudness and variations in intensity as synonymous terms for the reason of sub-glottal pressure as the sole driving force behind these terms.

### 2.3.4 Strategic Placement of Stress

Stress is an easily identifiable suprasegmental feature of speech both in a citation form as well as a characteristic feature of utterance. Phonetically speaking stress is a product mix of multiple articulatory manoeuvre which provides an observable difference in intensity of stressed syllable in relation to the neighboring ones, in length of the stressed syllable in relation to others, and stressed syllable is notified by serving as a point of inflexion. However in everyday normal conversation we listen as well as use speech with stress on each word, in fact it is placed on content words which carry prominence in terms of meaning in speech continuum. Phonologically speaking stress is the relative emphasis that may be given to certain syllables in a word, or to certain words in a phrase or sentence, or in the larger order of discourse. Perception wise in English, stressed syllables are louder, longer, as well as have a higher pitch than non-stressed syllables. English is acknowledged somewhat more of a stress-timed language, thus meaning that stressed syllables appear more or less uniformly in prominence, whereas un-stressed syllables are shortened. This paper articulates the aspect of stress as a unit of meaning which spreads itself beyond segmental levels of phonemic representation to syllable and then phrases or sentences or longer stretches of discourse which all result in an added musical component to the speech.

### III. TEACHING MUSICALITY FUNCTIONS OF SUPRASEGMENTALS

Musicality has all those enabling abilities allowing speaker to express given set of mental and emotional state like happiness, excitement, nervousness, anger, surprise, annoyance, displeasure etc. by using pitch variations, intensity manipulation or changes in volume. There are many other functions as well which musicality brings into the speech, like grammatical demarcation, emphasizing communicative intent, signaling new elements of discourse, and interactive component communication more meaningful. Normally most of the language learners as well as teachers believe that the word is the most vital as well as the first basic meaning-making unit in a language, maybe reason for this belief lies in the spelling drills of the early interaction with English language and also words distinctly separates themselves from each other as well. Though the description about musicality will remain incomplete if we keep a limited focus on words and its compositional units in syntactical structure, as suprasegmental components exist below and above the morphological atoms.

Pondering over the fact that language ability is uniformly present in each one of us does unequivocally suggest that there is an "innate hypothesis" (Chomsky; Putnam) tool of language in all of us to produce as well as perceive speech. We as listeners can differentiate between speech acoustic signals to any other sound through the generation as well as embedding of "neural acoustic property detectors" (Lieberman and Blumstein 149). A list of psychoacoustic tests mentioned by Lieberman and Blumstein (1988 154) tries unraveling the complex process taking place in every human listeners mind with such an ease where we can, without fail, make distinctions of these suprasegmental components present in the speech: variable stress contours of the utterance, different amplitude coda values, and the variations in durations. Teaching suprasegmentals will always be a challenge in the ELT classroom environment as there remain a lot of subjectivity in it but if we use the "kinasthetic memories" (Fry 128) of the listener so as to widen as well strengthen his conscious awareness about musicality component in the speech, then the understanding about the role of these variations become easy. Here is a list of activities which target a specific suprasegmental aspect of the speech:

### 3.1 Sudden Surge of Surprise – A Visit to a New Planet

Give students a task to create a story about their visit to a new planet which is much more advanced than Earth and they can brainstorm amongst the group formed for this specific purpose. The teacher can participate and lead by giving a presentation to begin with while imagining about his presence in the same scenario situation, this all happen while students are observing swings in pitch variation. This task shall help raising students' conscious awareness about intonation swing patterns.

### 3.2 Purposeful Placement of Pause – Time Travel to Pre Independence Days of Struggle

Give students a task to make a time travel into 1940s when Indians started feeling the heat of WW II on Britain's grip over territorial grip over Indian subcontinent. Ask them to create a story around any fictitious or real freedom struggle event expressing tribulations, fears, energetic passion of patriotism, or hopefulness of near imminent freedom. They can brainstorm amongst the group formed for this specific purpose. The teacher can participate and lead by giving a presentation to begin with while imagining about his presence in the same

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scenario situation, this all happen while students are observing purposeful placement of pauses and their corresponding functions. This task shall help raising students' conscious awareness about relevance and importance of pauses in speech.

### 3.3 Sense the Presence of Stressed word – Pulse the Stress

Give students a task to read a sentence as many number of times as many words does it have. The example sentence is – I didn't say Ajay stole my tablet;

**I** didn't say Ajay stole my tablet-     (not me, but somebody else)

I **didn't** say Ajay stole my tablet-     (have not said till now, maybe or maybe not in the future)

I didn't **say** Ajay stole my tablet-     (did not say at least; may be gestured, or wrote, or hinted)

I didn't say **Ajay** stole my tablet-     (not Ajay for sure, but somebody else)

I didn't say Ajay **stole** my tablet-     (did not steal; may be rented, loaned, or just sold)

I didn't say Ajay stole **my** tablet-     (surely not mine, but of somebody else)

I didn't say Ajay stole my **tablet-**     (not my tablet; but phone, or wallet or something else)

Students will notice each time the sentence will mean differently. They can brainstorm amongst the group formed for this specific purpose. The teacher can participate and lead by giving a presentation to begin with while sensing the change in meaning of the sentence. This task shall help raising students' conscious awareness about relevance and importance of stress in speech.

### 3.4 Raised Awareness of Melody – Kazoo, A Melody Teaching Tool

Improving melodic quotient in one's speech, learner has to raise conscious awareness level through observing for musicality with more intent and keenness. Kazoo is an easy toy tool for enhancing melodic awareness, the hollow design is such that it amplifies humming and therefore learners can use it follow and practice familiar intonational swings in language use. It amplifies voicing component of the sound produced by vocal cords and in case one tries blowing then no vibration will take place thus no melody. Thus this comes out to be an interesting technique for "eliminating all distractions of other elements of speech, so that students can concentrate on the placing of pitch changes" (Judy 35). The template example used in sub heading "Sense the Presence of Stressed word – Pulse the Stress" can be used here as well.

### 3.5 Raised Awareness of Stress and Vowel Length: Rubber band Illustration

This innocuous looking exercise works perfectly well in making the learner realize the contrast in duration on the principle of "kinesthetic focusing tool to reinforce" (Judy 38) every time one stretches the rubber for longer stressed syllables or vowels.

Example words can be, like: Sand / sænd/; Brand / brɑ:nd/; Grouping /gru: pɪ ŋ /; Author /ɔ : θ ə r/. Learners will get a chance to experience and feel the sensation of longer duration while simultaneously extending the rubber.

**3.6 Facial muscle - Mirror Match Your Expressions**

This activity helps the learner to pick subtle nuances of facial expressions by sensitizing first to keenly observe native speaker or teacher's demo sessions. The primary focus will be on compatibility of facial muscular manipulation to make a specific meaningful intervention, and then the same is imitated closely under teacher monitoring along with self practice sessions in front of the mirror, thus the name "Mirror Match".

These set of activities allows the learner to fun-learn the role of suprasegmentals in elevating, understanding and finally practicing musicality components in actual speech.

**IV. CONCLUSION**

Teaching musicality in language has to follow an approach which addresses as well as affects learner's all senses, feelings, apprehensions, curiosities and perceptions. There are more than obvious reasons to draw an analogy between music and language: both use variations in pitch, periodic fluctuations of rhythm, changes in loudness, occurrence of pauses in order to convey specific meanings. Moving a step forward in this direction, the paper suggested English language classroom efforts towards speaking skills should shift from overtly grammar focus towards including teaching musicality factor of speech, so that learners are more expressive and natural. An impressionistic transcription approaches teaching of suprasegmentals as a pedagogical tool by simulating and stimulating model of natural speech through raising conceptual awareness of its usage in all our speeches and everyday conversations. Paper concludes upon the importance of making students aware about musical dimensions in English language usage which very naturally act as meaning enhancer tool in their spoken English skill set.

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