

Speech Song: Foreign Language as Music on Stage

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Polemics have their limits, even though they may be necessary to question the dominant discourses and power structures of our intercultural scenario.¹

Plays are filled with words. When we want to witness a story, we enter a performance space, take a seat, and participate in a ritual that has been a part of our experience for much of human history using language as one medium for understanding. Our performed stories tell us about who we are, what we care about, and what we can become. In the United States, we most often witness these tales from within the comfortable confines of our mother tongue, and in most cases, we rely on the words that are spoken to understand the story. Given the significance of this community ritual and the shared information it provides, why should we consider using foreign language in theatrical production? What value could there be in adding a linguistic obstacle to the presentation of the story? Why would we want to disrupt traditional theater practice and make the familiar strange? Could it be that including a language we do not understand contains aesthetic and social possibilities we cannot see?

Language on the American stage functions most often as a device for narrative meaning. We understand what is happening in the story through the words the actors speak. But language has the potential to do more than advance the plot. Adding foreign language to a theatrical presentation both complicates and amplifies aesthetic possibility. When working in a mixed language format, theater artists often use subtitles to decode a second language. The opera patron is familiar with experiencing a foreign language performance through the filter of translation. But sometimes the standard convention of subtitling might serve as a form of word art in the hands of a clever video designer who utilizes size, color, placement, and animation to achieve a specific visual effect. And what if the sound designer were also to consider foreign language as an artistic element in production? The idea of using language as sound art is not new. Composer Michael Vincent describes

how he unintentionally discovered the music of language in a restaurant in Montreal. “By not being able to understand some of the words, I was forced to encounter them as sounds alone, and to use the same kind of perceptual listening I used when listening to music.”² Experimental musician Leigh Landy took a more direct approach. Struggling to help his students hear the music of the spoken word, he decided to play a tape of dialogue backwards. When he broke the referential link to the meaning of the words, the students were able to hear the multiple tonalities and rhythms that were previously invisible to them.³ According to artist Ansuman Biswas, “Language consists of grunts, tics, gestures, tones, melodies, flourishes, and steps, as much as discrete words. Sounds are fuzzy haloes of meaning rather than fixed objects. Writing obscures this fact.”⁴

Music psychologist Diana Deutsch demonstrates how we can learn to hear language as music in her interview on Radiolab entitled, “Behaves So Strangely.”⁵ She describes that when working in her lab one day, she unintentionally left a loop of speech playing on her computer. This short piece of dialogue played over and over while she was attending to other tasks. When she returned to her desk, she noticed that her perception of the original phrase, “behaves so strangely,” had transformed into a line of melody by virtue of having heard it many times in succession. When she investigated this phenomenon she discovered “a new perceptual transformation effect, in which a spoken phrase comes to be heard as sung rather than spoken, simply as a result of repetition.”⁶ This effect is irreversible. Once we perceive a line of dialogue as music, our brain will forever encode it that way, adding a permanent layer of perceptual (i.e. musical) experience to the line’s original referential meaning.

To understand why we sometimes hear language as music it helps to study the behavior of primates. Evolutionary anthropologists have come to believe that language began as a series of melodic vocalizations that were primarily used as a form of alarm or aggression. These “ape communication systems” which included vocalization, rhythm and gesture began “in Africa 6 million years ago” and are considered the base “from which human language and music ultimately evolved.”⁷ Studies of the long call structure used by apes have revealed that vocal communication is an important tool for recognizing individual members of social groups, and that this recognition is only possible because apes can distinguish the musical signature in individual voices.⁸ Anthropologist Thomas Geissman believes there to be a connection between this ape behavior and the evolution of language and music. “It makes sense ... that loud calls of early hominids may have been the substrate from which human singing and, ultimately, music evolved.”⁹ Connecting this possible evolutionary link between language and music to Deutsch’s research into the perceptual transformation effect of linguistic melodies, could it be that audience members hear the dialogue the actors’ speak as music? When a specific performance is memorable, we may find ourselves imitating not only the words the actor speaks, but the specific prosody he or she used in that

performance. When someone imitates Marlon Brando's "Stella!" for example, we recognize not only narrative context but also the physicality and musicality of Brando's vocalization of the line.

We have known for some time that the brain processes language in the left hemisphere, while music processing occurs on the right.¹⁰ New discoveries are now challenging this tidy bifurcation as neuroimaging research uncovers an identifiable overlap in the music and language centers of the brain.¹¹ Deutsch believes that this helps explain the musical illusions that are at the center of her research as "the boundary between speech and song can be very fragile."¹² Most of us have been emotionally moved by music at some point in our experience. Although spoken language is most often used referentially, speech can also use the musicality in prosody to control an emotional effect.¹³ By changing the music in the line, "Nice to see you," one can transform a simple phrase from a greeting to a threat. This appropriation of prosody to convey intention connects directly with the emotional aspects of music listening. "Just as musical expressions of emotions can be conveyed by variations in pitch and articulation, emotions can be expressed by modulations of the tone of the voice."¹⁴ Prosody is one of the actor's central tools when conveying meaning on stage. One might argue that gibberish loaded with expressive intonation might have as much or more meaning as a line delivered in a pure monotone. And gibberish may be what theater patrons hear when an actor speaks in a foreign tongue.

Although any foreign language might sound like so much nonsense to a theater audience, every language contains distinct aural patterns. "Each language has its own musical personality," says Diana Deutsch.¹⁵ If we were to map the linguistic ingredients that define the musical characteristics of a language (rhythm, intonation, stress, inflection), we would discover that each has a musical stamp that makes it identifiable, even to those who do not speak that language. "Different languages have their own 'pulse,' or in other words their own timing pattern for the regular succession of rhythmic units."¹⁶ English is an accented or stressed language sharing similarities to Russian in this regard, but quite different in musicality from tone languages like Mandarin, Vietnamese or Korean. When looking at the structure of language and music, it is not difficult to draw a number of parallels. Both use pitch, duration, rhythm, and tempo to construct expressive phrases. In a piece of music individual notes might be seen as words that gather together to form sentences or a phrase of music might repeat in theme and variation creating a musical conversation with the audience. Steven Brown has invented his own term for this connection between the structure of music and language, finding that the features that overlap in each cannot be identified as belonging to one discipline or the other but must be seen as belonging to both. They are therefore considered "musilinguistic."¹⁷ When working with mixed or foreign language on stage, it may be useful to identify and exploit the musilinguistic qualities in the dialogue. Audience members may focus primarily on the narrative information in spoken Spanish, for example, through subtitles, but the actors

and the director have the opportunity to explore, to contrast, to amplify, or to diminish the melodic vocabularies available in the structure, tone, and cadence of the Spanish language. The audience may convert the written words into meaning, but they will hear and emotionally respond to the melody of the language, perhaps without even realizing they are doing so.

Deutsch has also discovered a link between musical training and linguistic development. Because of the inherent musical qualities in tonal languages like Mandarin, children begin to develop their musical abilities while learning to speak. This turns out to have a significant effect on the number of people in tone language cultures who demonstrate perfect pitch.¹⁸ When adding additional musical training to this equation, the percentage of Mandarin speakers demonstrating perfect pitch rises significantly.

Among the English speakers, the prevalence of perfect pitch was just 8 percent among those who had begun musical training at or before age five and 1 percent among those who had begun musical training between ages six and nine. The statistics were similar among East Asian students who were not at all fluent in their native tone language. In contrast, the students who were very fluent tone language speakers performed extraordinarily well on our test: 92 percent of those who had begun musical training at or before age five had perfect pitch as did 67 percent of those who started music lessons between ages six and nine.¹⁹

The relationship between musical and linguistic processing may be shaped in childhood, but it turns out that our native tongue may play a role in shaping how we hear music as adults.²⁰ This could prove significant for audience members who have musical training or musical talent when watching a foreign or mixed language production. Their sensitivity to variations in pitch, tone, rhythm and tempo may amplify their ability to hear and appreciate the musicality of language. Deutsch suggests that this sensitivity is significant because of the ways in which the musicality of language is bound with prosodic expression. “Musically trained children may thus be at an advantage in grasping the emotional content—and meaning—of speech.”²¹ Prosody influences and often determines how we hear meaning in conversation. The more sensitive we are to rhythm and intonation, the better we are at saying what we mean and hearing what others intend. Deutsch’s research suggests that improving our musical sensitivity to language might enhance our ability to communicate.

Psychologist Anne Fernald has made important discoveries in the development of prosody sensitivity. Fernald’s research determined that we first perceive linguistic meaning through the musicality of prosody when we are infants, and that this meaning is processed emotionally. Recognizing that “parentese” contains a musicality all its own, Fernald conducted experiments to test infant response to prosodic patterns within multiple linguistic contexts, including gibberish.²² She found that infants rely on the melody of language to decipher the speaker’s intent and that their emotional response to these communication cues is consistent across linguistic platforms and across

cultures. “Whatever country we come from and whatever language we speak, we alter our speech patterns in essentially the same way when talking to infants.”²³ Another clue to our developmental connection to the music of language comes from Alison Wray’s identification of formulaic or holistic phrases when we are first learning to speak. A formulaic phrase is one in which the sound of the whole conveys more meaning than the sum of its parts.²⁴ Happy Birthday, a commonly used formulaic phrase, when parsed for grammatical structure, loses the vibrancy we intend to convey. These two words when spoke together contain more information than just “Happy” (an emotional state) or “Birthday” (the day one was born). This phrase is a linguistic unit that holds its own bonded meaning, part of which is experienced through cultural context, and part of which exists in the specific musicality with which it is spoken. Other formulaic phrases include speech fillers like “you know what I mean?” or habitual forms of speech that are a part of our polite behavior system such as “Nice to meet you.” Nursery rhymes are so popular with young children because the holistic phrasing and rhythms they contain help children connect the music of the words to their referential meaning. Wray labels the tendency of young learners to aggregate chunks of speech *item learning*.²⁵ The meaning of phrases like “bye-bye,” “good job,” and “thank you very much” are directly connected to the melody in the line. Children use these formulaic phrases as an intermediary step when transitioning from baby talk to the use of full sentences. We continue to use this holistic processing unconsciously as adults, and for many it becomes a mechanism for deciphering meaning when learning a foreign language. Beginning language classes encourage students to memorize common phrases such as “excuse me,” “how are you,” and “what time is it?” long before learning their components of grammar or vocabulary. Archeologist Steve Mithen encourages this position: “We might come to understand the meaning of an utterance spoken to us in a foreign language by processing it holistically rather than compositionally.”²⁶

Musicologists Steven Brown and Nils Wallin have suggested that “the study of music origins is central to the evolutionary study of human cultural behavior generally.”²⁷ Music is directed linked to our social development cognitively and emotionally. Anne Fernald describes the musicality of infant directed speech as “touch from a distance” because babies learn what parents mean through the melody of their speech, and respond emotionally to what they hear musically.²⁸ An infant knows when s/he has done something wrong through a melody which scolds or praises and might then begin to cry in frustration or disappointment or to laugh with joy. This is true in the United States, Japan, or Kuala Lumpur. John Wynne claims that sound art offers “paralinguistic” strategies as “a way of expressing cross-cultural experiences that language itself cannot achieve.”²⁹ Could the musicality of foreign language function as a paralinguistic strategy to create touch from a distance while we participate in a social ritual that is part of our evolutionary history? And can this experience change how we feel?

Many people find that listening to music generates an emotional response. “There is constant stimulation to which the listener responds; musical phrases continuously elicit feelings of happiness or sadness. Thus a way to conceptualize music is as a series of stimuli that elicit surges of emotion.”³⁰ Brown claims that, although we experience language referentially, language can also manipulate emotion through the musicality of prosody. Emotion can change our perception of things, persuading us to see an object, person, or event through a positive or a negative lens.³¹ Emotion can also change our actions as “people who are happy tend to be more helpful and cooperative.”³² One of the phenomenological rules of a theatrical event is that the audience arrives at the theater bringing into the performance space a variety of emotional states, mental preoccupations, and expectations about what they are about to see. We enter these activities as a mentally fractured and diverse community, and over the course of a performance, our emotional response unifies some of us as a group. This moment in time, when the audience transitions from an individual state of mind to a shared consciousness, provides a window for encouraging empathy and shaping behavior. Judith Becker suggests that music “can be a catalyst for a changing state of consciousness.”³³ Mithen goes further, believing that music creates a blend of identity in the shared experience which results in an increased interest in cooperation.³⁴ According to Isabelle Peretz, we experience this shared identity cross-culturally, allowing for the possibility that we might reduce extreme points of view and negative frames of mind through the emotional stimulation music listening can provide.³⁵ According to Judith Becker, “Musical events set up an aural domain of coordination that envelops all those present.”³⁶ This coordination, this sense of belonging, allows members of a group to view one another as “someone like me.” Shared emotional experience softens resistance to change and encourages empathy and understanding. “A person’s socially induced emotional state affects his or her social behavior toward other people.”³⁷ Judith Becker describes this state of consciousness as an opportunity to “temporarily be another kind of person than one’s ordinary, everyday self.”³⁸ Deutsch draws the same conclusions, encouraging us to recognize and utilize the links between music and language and the effect this consciousness can have on our personal development. “Music and speech seem to be mirror images, with both playing integral roles in the development of the other—in the way we, as people, bond and communicate, in how we perceive the sounds around us, in our understanding of language and in the workings of our minds.”³⁹

What value could there be in presenting a play using mixed or foreign language? Is it worth risking the alienation of an audience who expects the words to tell the story of the play? We have seen how our brains can experience language as music, whether or not we consciously register this process. The combination of each language’s aural personality, as well as the prosody used by the speaker to express intent, generates a specific melody that leads to both an intellectual and an emotional response in the listener. Our

ability to recognize and respond to the musicality of speech begins at birth as our parents use baby talk or parentese to communicate with us. As our brains develop and we begin to learn to speak, we deepen this musilinguistic connection through formulaic phrases, allowing the sound of a phrase to take precedence over grammatical structure. As Deutsch's research suggests, those with talent, training, or a developed appreciation of music may be more sensitive to the meaning encoded in the prosody of speech, making them better communicators. This implies that there could be social advantages to recognizing and enhancing our understanding of the musical qualities of speech.

Psychologists have demonstrated the powerful emotional effect music can have on a state of mind. Theater artists regularly use music to encourage a specific emotional response in their audience. What I suggest in this article is that language can become a component in this musical equation, opening the sound design to new possibilities. By dissociating the sound of the spoken word from its referential context, we may be able to use the music of language (in addition to or in place of actual music) to change the way an audience feels. Forcing a neurological cross reference between music and language may turn the alienation of hearing words spoken in a foreign tongue into the perception of words as a linguistic melody. And if the story of the play also lives within a foreign cultural context, we have an opportunity to reframe the audience's emotional response to the culture in question. The melody of the words might transform how we feel as we witness the performance, increasing the potential for empathy and cultural understanding. By way of example let me offer the following. Imagine an American audience witnessing a domestic scene set in Syria and played in Arabic. We see a husband and wife counseling a troubled child. Were we to present this story in 2004, some patrons might enter the theater with a charged point of view, one shaped at least to some degree by media coverage of the War on Terror. In our story we present a different view of Arab culture, and while doing so, we ask the actors to speak (at least some of the time) in Arabic. While our rational mind processes the humanization that this domestic scene encourages, we cannot decipher precisely what is being said. In this circumstance, the language begins to function as a soundscape, a melody that we may begin to dissociate from a descant of terror to something else, something new, perhaps something less negative. The audience sees and hears the cultural context we present, but because of the musilinguistics of the language, they feel something as well. And perhaps these feelings change their point of view. Although theater artists cannot control or predict a precise emotional response in the audience, it may be possible, through the music of language, to encourage more openness to the unfamiliar. And this is one of the values of including foreign language on stage. Foreign language as music in theater production (as distinct from opera) has the potential to generate a shared emotional response that could reframe the lens with which we view those different from us.

Notes

- ¹ Bharucha, Rustom. *Theatre and the Word: Essays on Performance and Politics of Culture*. (New Delhi: Manohar Publications, 1990) 11.
- ² One might consider using language as a form of visual, including words as an element of the set design. In this way words offer us shape, color, texture, and size as well as linguistic meaning.
- ³ Landy, Leigh. 'The Music in Words' in *The spoken word in artistic practice: Playing with words* edited by Cathy Lane (London: CRISAP, 2008) 59.
- ⁴ Biswas, Ansuman. 'Sound and Sense' in *The spoken word in artistic practice: Playing with words* edited by Cathy Lane. (London: CRISAP, 2008) 42.
- ⁵ You can experience this illusion for yourself through this website. Deutsch, Diana. Radio Lab, 'Behaves so Strangely,' <http://www.radiolab.org/2007/sep/24/behaves-so-strangely/> (March 2012).
- ⁶ Deutsch, Diana, Trevor Henthorn, and Rachel Lapidis. 'Illusory transformation from speech to song.' *Journal of the Acoustical Society of America* 129, No. 4 (2011), 2252.
- ⁷ Mithen, Steven. *The Singing Neanderthals: The Origins of Music, Language, Mind and Body*. (Harvard University Press, Cambridge, MA, 2006) 121.
- ⁸ Uhjelyi, Mária. 'Long-call structure in apes as a precursor for language' in *Approaches to the Evolution of Language: Social and Cognitive Bases* edited by James R. Hurford, Michael Studdert-Kennedy and Chris Knight. (Cambridge University Press, 1998) 186.
- ⁹ Geissmann, Thomas. 'Gibbon Songs and Human Music from an Evolutionary Perspective' in *The Origins of Music* edited by Nils L. Wallin, Björn Merker, and Steven Brown. (MIT Press, Cambridge, MA, 2000) 118.
- ¹⁰ Jourdain, Robert. *Music, the Brain, and Ecstasy*. (William Morrow and Company, Inc. 1997) 274.
- ¹¹ Patel, Aniruddh D. 'Language, music, syntax and the brain.' (*Nature Publishing Group* 2003) Available at: <http://www.nature.com/natureneuroscience.675>.
- ¹² Deutsch, Diana. 'Speaking in Tones' (*Scientific American*, July/August 2010) 37.
- ¹³ Mithen, 25.
- ¹⁴ Peretz, Isabelle. 'Listen to the Brain: A biological perspective on musical emotions' in *Music and Emotion: Theory and Research* edited by Patrik N. Juslin, and John A. Sloboda. (Oxford University Press, London, 2001) 122-123.
- ¹⁵ Deutsch, Radio Lab interview.
- ¹⁶ Auer, Peter, Elizabeth Couper-Kuhlen, Frank Müller. *Language in Time: The Rhythm and Tempo of Spoken Interaction*. (New York: Oxford, Oxford University Press, 1999) 118.
- ¹⁷ Brown, Steven. 'The "Musilanguage" Model of Music' in *The Origins of Music* edited by Nils L. Wallin, Björn Merker, and Steven Brown. (MIT Press, Cambridge, MA, 2000) 277.
- ¹⁸ Perfect pitch, sometimes called absolute pitch, is the ability to identify or produce a note without assistance from an outside source.
- ¹⁹ Deutsch, Diana. 'Speaking in Tones' (*Scientific American*, July/August 2010) 43.
- ²⁰ Deutsch, 42.
- ²¹ Deutsch, Diana. 'Speaking in Tones' (*Scientific American*, July/August 2010) 43.
- ²² Parentese is also known as motherese, Infant Directed Speech (IDS) or baby talk.
- ²³ Mithen, 72.
- ²⁴ Wray, Alison. *Formulaic Language and the Lexicon*. (Cambridge University Press, 2002) 4.

- ²⁵ Wray, 106.
- ²⁶ Mithen, 19.
- ²⁷ Brown, S. and N.L. Wallin, 'An Introduction to Evolutionary Musicology' in *The Origins of Music* edited by Nils L. Wallin, Björn Merker, and Steven Brown. (MIT Press, Cambridge, MA, 2000) 4.
- ²⁸ Fernald, Anne, Radio Lab, 'Sound as Touch,' <http://www.radiolab.org/2007/sep/24/sound-as-touch/> (March 2012).
- ²⁹ Wynne, John. 'To Play or Not to Play?' in *The spoken word in artistic practice: Playing with words* edited by Cathy Lane. (CRiSAP, London, U.K. 2008) 81.
- ³⁰ Niedenthal, Paula M. and Marc B. Setterlund. *Emotion Congruence in Perception*. (Personality and Social Psychology Bulletin: 20, 1994) 404.
- ³¹ Niedenthal, et al, 410.
- ³² Mithen, 99.
- ³³ Becker, Judith. 'Anthropological Perspectives on Music and Emotion' in *Music and Emotion: Theory and Research* by Patrik N. Juslin, and John A. Sloboda. (Oxford University Press, London. 2001) 145.
- ³⁴ Mithen, 215.
- ³⁵ Peretz, 114.
- ³⁶ Becker, 151.
- ³⁷ Konečni, Vladimir J. 'Social Interaction and Musical Preference' in *The Psychology of Music* edited by Diana Deutsch. (Academic Press, London, 1982) 503.
- ³⁸ Becker, 142.
- ³⁹ Deutsch, 'Speaking in Tones' 43.