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Speech Song: The Value of Using Foreign Language in Theatrical Production

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Abstract

Story-telling in the theater uses language as one medium for conveying narrative information. We use words to tell stories with which we can identify; we abstract words to amplify the absurdity of the human condition; we put words to music and allow our characters to sing the passion of the dramatic moment. This reliance on words can generate a resistance to the use of foreign language in theatrical production. If the audience cannot decode the grammatical system in a sentence of dialogue, then foreign language becomes an obstacle to understanding. From a neurological perspective, it turns out that parts of the brain experience language as both speech and music, opening up possibilities for the use of words as a musical rather than a narrative device. Music psychologist Diana Deutsch has identified the science behind this phenomenon through her research into naturally occurring musical illusions. Deutsch demonstrates that through repetition, speech can be perceived by the human ear as music.Psychologist Anne Fernald's research into language development in infants shows that babies understand the music of language long before they recognize words. 'Motherese' contains musical melodies whose form remains consist across cultures. This paper examines the mechanisms and possibilities of using foreign language as music in theatrical production. The use of foreign language in story-telling offers new possibilities for artistic expression, and may help reframe the audience relationship to the cultural context of language by turning words into song.

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Melanie Dreyer-Lude Cornell University Md496@cornell.edu 412-512-4446 ".. I have learned that the strongest resistance to cultural domination lies in creative work. Polemics have their limits, even though they may be necessary to question the dominant discourses and power structures of our intercultural scenario."

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. Our performed stories tell us about who we are, what we care about, and what we can become. They may be funny, sad, political, sentimental, pure fluff or philosophical debate. We 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? Is it possible that including a language we do not understand adds a value we cannot see?

Language on the stage functions most often as a device for narrative meaning. We understand what is happening to through the words the actors speak. It is also possible to use language as a form of visual art when telling a story, including words as an element of the set design. When presenting a play in a foreign language, we often use subtitles to decode the acoustic jumble of what we hear. Subtitles can function as their own form of word art in the hands of a clever video designer who utilizes size, color and placement to achieve a specific visual effect. In this paper, I will focus on the musicality of language. Through an interrogation of the evolutionary, neurocognitive, psychological, and developmental aspects of language and music, I will consider how the melody of words might transform how we feel when we witness a performance, and how the use of foreign language in theatrical production may have the potential to increase empathy and enhance cultural understanding.

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.' 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 could suddenly hear the multiple tonalities and rhythms that were previously invisible to them. Artist Ansuman Biswas articulates why we often fail to hear the music in language: '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.'

¹ Bharucha, Rustom. *Theatre and the Word: Essays on Performance and Politics of Culture.* (New Delhi: Manohar Publications, 1990) 11.

² Vincent, Michael. 'Re-composing words' in The spoken word in artistic practice: Playing with words edited by Cathy Lane (London: CRiSAP, 2008) 141.

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.

Music psychologist Diana Deutsch demonstrates how we can learn to hear language as music in an interview with the program Radiolab entitled, 'Behaves So Strangely.' 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.' It turns out that 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 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.' 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. 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.'

We have known for some time that the brain processes language in the left hemisphere, while music processing occurs on the right. The traditional understanding of this cognitive divide is undergoing revision as neuroimaging research uncovers identifiable overlap in the music and language centers of the brain. 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.' fragile.' Although spoken language is considered primarily referential, speech can also emotionally manipulate through intonation and the controlled use of prosody. By By changing the music in the line, 'Nice to see you,' we can transform a simple

¹ 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).

² 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.

³ Mithen, Steven. *The Singing Neanderthals: The Origins of Music, Language, Mind and Body.* (Harvard University Press, Cambridge, MA, 2006) 121.

⁴ 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.

⁵ 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.

⁶ Jourdain, Robert. *Music, the Brain, and Ecstasy*. (William Morrow and Company, Inc. 1997) 274.

⁷ Patel, Aniruddh D. 'Language, music, syntax and the brain.' (*Nature Publishing Group* 2003) Available at: http://www.nature.com/natureneuroscience 675.

⁸ Deutsch, Diana. 'Speaking in Tones' (Scientific American, July/August 2010) 37.

⁹ Mithen, 25.

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.'

'Each language has its own musical personality,' says Diana Deutsch, an enticing idea for an artist interested in appropriating the musical aspects of language.² language.² 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.' 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. 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 or the other but must be seen as both. They are therefore considered 'musilinguistic.'

There is 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.⁵ 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. ⁶

Deutsch also determined that there is a relationship between musical training and reading ability. Musical training may help develop literacy by accelerating reading skills, while good readers perform well on tests for musical aptitude. The relationship

¹ 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.

² Deutsch, Radio Lab interview.

³ 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.

⁴ 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.

⁵ Perfect pitch, sometimes called absolute pitch, is the ability to identify or produce a note without assistance from an outside source.

⁶ Deutsch, Diana. 'Speaking in Tones' (Scientific American, July/August 2010) 43.

between musical and linguistic processing may be shaped in childhood, but it turns out that our native tongue and its relative musicality may play a role in shaping how we hear music as adults. Because the musicality of language is bound with prosodic expression, this influences 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.

Psychologist Anne Fernald has identified 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.² 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.'3 Another clue to our developmental connection to the music of language comes from Alison Wray's identification of our use 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. Happy Birthday, a commonly used formulaic phrase, when parsed for grammatic structure, loses the vibrancy we intend to convey. These two words contain within them more information than just 'Happy' (as in I feel happy) or 'Birthday' (the day I was born). This phrase is a linguistic unit that contains its own bonded meaning, 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 – 'Nice to meet you.' The holistic phrasing and the rhythm and musicality of nursery rhymes help young children connect the music of words to their referential meaning. Wray labels the tendency of young learners to aggregate chunks of speech item learning. 5 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. This holistic processing that we all experience as children and continue to use unconsciously as adults may contain a key component to making foreign language work as an aesthetic device and a tool for cultural understanding. 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.'6

And it is here that we must make the final conceptual leap. 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.' Anne Fernald

¹ Deutsch, 42.

² Parentese is also known as motherese, Infant Directed Speech (IDS) or baby talk.

³ Mithen, 72.

⁴ Wray, Alison. Formulaic Language and the Lexicon. (Cambridge University Press, 2002) 4.

⁵ Wray, 106.

⁶ Mithen, 19.

⁷ 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.

describes the musicality of infant directed speech as 'touch from a distance.' John Wynne claims that sound art offers 'paralinguistic' strategies as 'a way of expressing cross-cultural experiences that language itself cannot achieve.' 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 think and feel?

I have demonstrated that at least a portion of our perceptual experience of language is processed as music. The critical component here is that our experience of music is emotional. Many people find that listening to music can generate 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.' 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. Emotion can also change our actions as people who are happy tend to be more helpful and cooperative.' 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 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.' Mithen goes further, believing that music creates a blend of identity in the shared experience which results in an increased interest in cooperation.⁷ 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. According to Judith Becker, 'Musical events events set up an aural domain of coordination that envelops all those present.'9 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. 10 Judith Becker describes this state of consciousness as an opportunity to 'temporarily be another kind of person

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¹ Fernald, Anne, Radio Lab, 'Sound as Touch,' http://www.radiolab.org/2007/sep/24/sound-as-touch/ (March 2012).

² 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.

³ Niedenthal, Paula M. and Marc B. Setterlund. *Emotion Congruence in Perception*. (Personality and Social Psychology Bulletin: 20, 1994) 404.

⁴ Niedenthal, et al, 410.

⁵ Mithen, 99.

⁶ 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.

⁷ Mithen, 215.

⁸ Peretz, 114.

⁹ Becker, 151.

¹⁰ Konečni, Vladimir J. 'Social Interaction and Musical Preference' in *The Psychology of Music* edited by Diana Deutsch. (Academic Press, London, 1982) 503.

than one's ordinary, everyday self.' 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.' 2

So we return to the initial question: What value could there be in presenting a play using foreign language? Is it worth risking the alienation of an audience who expects the words to tell the story of the play? When hearing words in our native language, we listen almost exclusively for referential meaning. But behind these words is a world of music. American culture remains resistant to the foreign language experience. We prefer not to read books in translation, see movies with subtitles, or spend the time to become fluent in a second language. This linguistic isolationism inhibits our ability to see and understand cultures whose language is different from our own. Movements to designate English as the official language of the United States suggest a possible connection between xenophobia and a lack of exposure to foreign tongues. Psychologists have demonstrated the powerful emotional effect music can have on a state of mind. By dissociating the sound of the spoken word from its referential context, we may be able to use the music of language to change the way an audience thinks and 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. With this we might generate a shared emotional response, creating an opportunity to use the communal experience of theater to reconsider and reframe the lens with which we view those different from us.

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¹ Becker, 142.

² Deutsch, 'Speaking in Tones' 43.

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