

The Foundation of Expression: How Music Shapes Language, History and Humanity

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Abstract: Music is inextricable in our daily lives. As infants, we use the musical and linguistic sounds of a language to be able to learn our mother tongue. In essence, music enables humans to learn languages at the first place. Without music, no one will be able to learn his mother tongue language as an infant with no previous dataset of syntax and semantics to resemble it. When humans listen to songs, their heartbeat rhythm aligns with one of the song, and repetitive lyrics create an echo chamber in the brain, creating new habitual thoughts and affecting emotions. The development of music media and the increased level of technology has led to widespread music which is marketed to a diverse group of people, increasing a sense of community and prosocial behaviour among groups. Underneath it all, music has a great power to break deep-rooted norms and beliefs, challenge one's sense of identity, and forge a new community where it is once impossible with many differing attitudes and conflicting beliefs.

Keywords: Musical and Linguistic Sounds, Language, Heartbeat Rhythm, Emotions, Prosocial Behaviour, Community, Attitudes and Beliefs.

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I. INTRODUCTION

As early as a fetus in the womb, humans have always been exposed to rhythm, the mother's heartbeat, and pitch, voices heard from outside the womb. This then enlarges to melody, a combination of pitch and rhythm, which is then coupled with timbre as one's vocal chords develop fully. As humans gather, they create texture - the interaction of many layers of sound together. This music, the way in which air molecules hit someone's eardrum, has a great effect on how humans learn to communicate and behave.

Plato, the Greek philosopher, stated that making someone learn the culmination of melody, poetry, and dance, has great influence on a soul as rhythm and harmony perforates a human's inner heartbeat pace and brain wiring.¹ He also noted that music influenced social structure and ethical principles significantly. This tells me that music has always been a fundamental part of human nature that has the power to affect and influence groups of people. This essay stands to prove Plato's points, and believes that music has changed the course of history significantly in many ways.

II. MUSIC IS THE FIRST ESSENTIAL FOUNDATION FOR PEOPLE TO LEARN LANGUAGES

Being deprived of the ability to hear musically would render us incapable of learning languages. Infants can differentiate the phonemes of all languages². This ability evidences that they are sensitive to timbres. Not only are they sensitive to timbres, they are also sensitive to the rhythm in languages. Indeed, infants' early attention to rhythm³ suggest that they engross in their language's auditory structure - the rhythm of pressure in its accent and the dialectical sound.

In fact, infants decompose words in a language through the stress in its rhythm⁴. Infants are notice attentive cues by acutely hearing how their language is composed. Based on the rhythmic stress, melodic contour, and timbral contrast,

¹ <https://www.popularbeethoven.com/plato-on-music/>

² https://www.assessmentpsychologyboard.org/edp/pdf/Building_Blocks_of_Language.pdf;

<https://legacy.cs.indiana.edu/~port/teach/641/Werker.Tees.crosslg.sp.perceptn.1984.pdf>;

<https://pubmed.ncbi.nlm.nih.gov/8035876/>

³ <https://pubmed.ncbi.nlm.nih.gov/10585517/>;

<https://pubmed.ncbi.nlm.nih.gov/10585517/>

⁴ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3439120/>

⁵ <https://www.sciencedirect.com/science/article/pii/S1364661399013637>

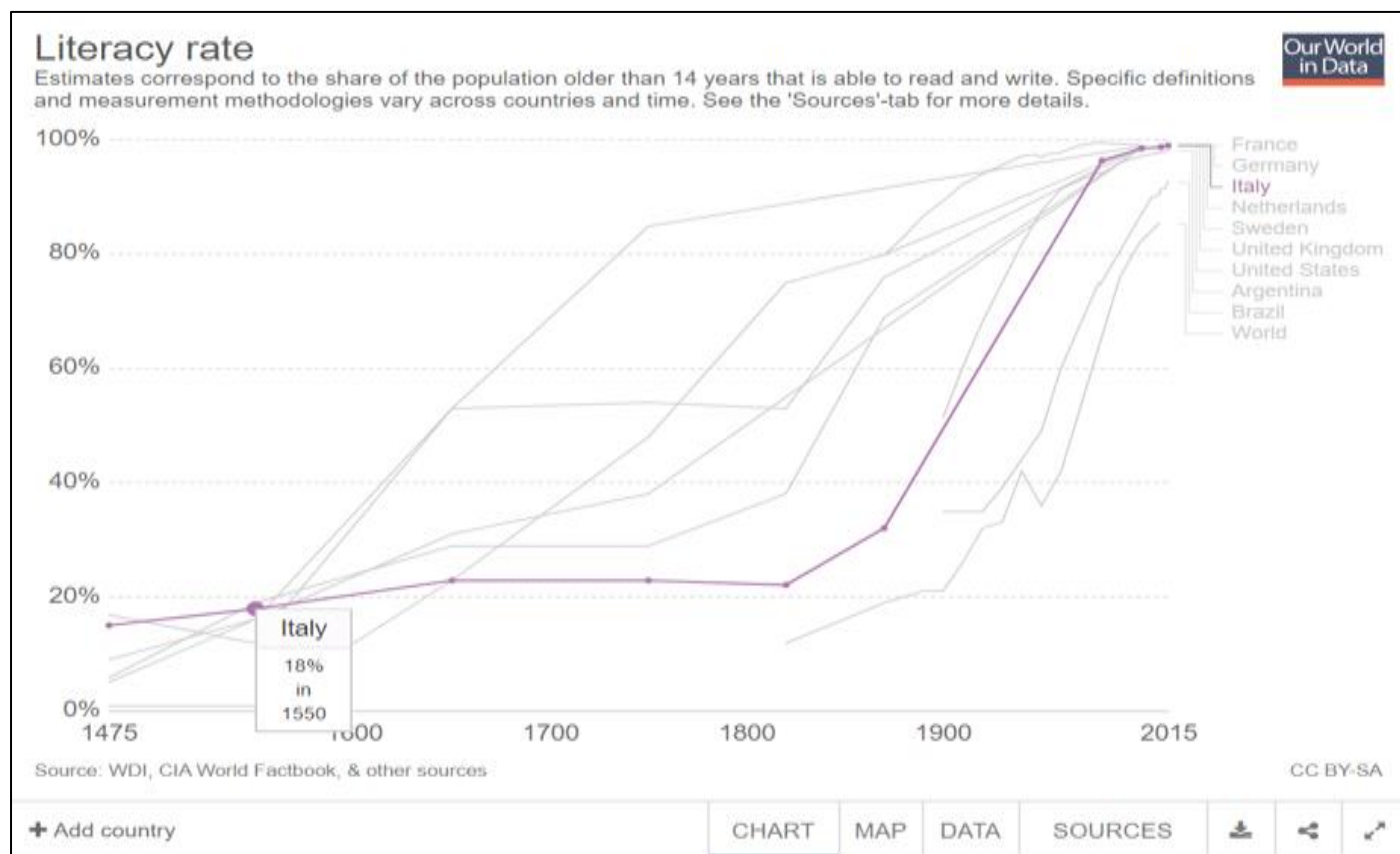
this becomes a foundation for the development of semantic and syntactic aspects of language.⁶

Perceiving the rhythms in their language, they begin to process meaning and learn how to arrange words and phrases to create a sentence in their language. After infants attune to the strains and tones of their language, they would start learning other aspects of the language, such as processing meaning and syntax. It is the first thing that infants must learn in order to master their language. Infants learn languages from the musical rhythm of their language. Put in other words, the absence of music would thus totally eliminate language in humans.

➤ *Had Languages not been Formed in the First Place, Literacy would not have Existed.*

Literacy is one's ability to deliver one's thoughts clearly to the world by mediums such as reading, writing, and speaking.. Language facilitates these four abilities. From China to Egypt to South America, it is fascinating how numerous civilisations have used language to facilitate literacy.

In the late Middle Ages, Italian merchants adopted two critical innovations from the East: paper and new, more efficient numbers (we call them Arabic numerals, but they were invented in India)⁷. This led to a boost in education, commerce, and scientific advancements that we now call Renaissance. During the Renaissance, great advancements in astronomy, architecture, politics, science, engineering, mathematics, chemistry, and physics were found. Interestingly, this great boost of development is directly correlated to its literacy growth in Italy during the time.



Graph 1: Literacy Rate Growth in Countries from <https://caryprojects.wordpress.com/literacy-during-the-renaissance/>

The invention of printing and more efficient numbers allowed the preservation and dissemination of ideas and knowledge. For centuries, literacy was a pathway to power.

This “exercise of power” is directly linked to literacy. Language serves the foundation of literacy. Music is the first essential foundation for people to learn languages. Thus, without music, languages would not have been used, literacy would not have happened, and thus civilisation would not have occurred.

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<https://www.sciencedirect.com/science/article/pii/S1364661399013637>

⁷<https://sjquillen.medium.com/how-literacy-created-civilisation-part-i-in-the-beginning-was-the-word-8984175402b>

III. MUSIC SHAKING CULTURAL AND RACIAL BARRIERS

Plato stated that shifts in musical trends might impact the core principles of society, influencing social structure and ethical principles significantly⁸. According to Wilson(2007)⁹, music promotes group cohesion, affinity, and cooperation among group members.

Music can be heard by many people at the same time. With the same beat of music, neurons in the brain fire and beat in the same rhythm. Listening to the same music synchronises their brain waves. Some researchers believe it is the same type of music that a group of people can feel connected due to how the music lets our brains beat in the same rhythm, which also coordinates our gestures and mannerisms.¹⁰ This collective meaning and shared experience further explain the ways music has shown to influence cultural and social norms in groups of people, and their sense of identity and community.

One of the strongest examples of music significantly shaking cultural barriers is the influence of rock-and-roll in the 1950s and 1960s, particularly its role in shaping the youth culture at the time. America in the 1950s had very tense race relations and was a racially divided place. Due to this, black people were even prevented from getting on the property ladder in certain areas.

This segregation made it difficult for black artists to create music that breaks the cultural and racial norms. Artists like Presley and Haley then composed rock 'n' roll, a black music genre that was widely accepted by both white and black youth masses. The group ultimately become followers of not just the artist, but also the genre.

Rock and roll was wholly accepted and rose in its popularity, especially for teenagers. Rock and roll took issue with the deep-rooted faiths that whites and blacks needed to be separated. Most importantly, it challenged the norm that the culture of the blacks was beneath the whites. At times, a concert was deemed to be for white audiences, and for black audiences at other times. In both concerts, different gates were used for different races, and they were separated by a long rope that serve as a barrier. Over time, the black and white races started to mingle in concerts. In a country where segregation laws were tight, never, in history, have white and black Americans been under the same roof¹¹. Rock 'n' Roll music, was a significant, major step in breaking racial boundaries. It is surely not a coincidence that major civil right actions and the popularity of rock and roll occurred at the same time. Segregation laws have ended in America a decade since. The influence of Rock and Roll has not only

challenged the idea of racial mixing, but has also challenged conservative social norms.

IV. MUSIC AFFECTING BEHAVIOUR AND SOCIAL NORMS IN SOCIETY

Music arrives at the ear as sound waves. These waves strike the eardrum and vibrate it. In response, these cells release chemical neurotransmitters that activate the auditory cortex. The brain then converts this musical auditory information, and many different parts of the brain are activated to respond to it. Music opens and turns on some of the most widespread neural pathways in the brain. The reaction is a stimulation of neural components that are similar to same feeling we get from food and sex, heightening our emotions and increasing pleasure. If music has such a great influence on physiological states as Vaajoki suggests, it is possible that songs with upbeat rhythms and hostile genres can lead to faster heartbeat, increasing blood flow and leading to exasperated behaviours¹². Higher-energy punk music and metallic rock portrays violence and death. This influences negative emotions and gradually shapes our behaviour and perception of the world.

Rock and roll was thought to be the blame of juvenile delinquency. In their Peer Group Mediation Model, Slater and Henry(2013)¹³ propose that music and music videos are directly related to adolescent drug use, as adolescents may imitate this behaviour. Music provides them with social identities that encourage them into certain social groups and conform into peer pressure. Peers explicitly or implicitly demand submission, reinforcing the behaviours and attitudes in them. Being involved in such peer groups will not only make them adapt these values due to peer pressure, but also drive them deeper into certain genres of music, and enforce deeply its values. Thus, media and peers are part of a "reinforcing spiral"¹⁴. Music Marker Theory suggests that music fans may adopt certain behaviours and mannerisms as they try to imitate ones in the music media. According to a study conducted by the American Journal of Public Health from 1996 to 1999, African-American teenage girls were '3 times more likely to have hit a teacher; more than 2.5 times as likely to have been arrested; 2 times as likely to have been arrested; and more than 1.5 times as likely to have acquired a new sexually transmitted diseases, used drugs, and used alcohol over the 12-month follow-up period when they watch rap music videos.

Rock and roll was one of the examples of music that changed the course of history by allowing the widespread rebellion and cultural shift among teenagers. Without rock and roll, the empowerment of teenagers during that time might not have been as powerful or influential. Rock and roll

⁸ <https://www.linkedin.com/pulse/ancient-greek-philosophy-music-polvinyl-vinyl-pressing-factory-mka0f>

⁹ <https://library.wur.nl/WebQuery/titel/1853467>

¹⁰ https://greatergood.berkeley.edu/article/item/how_music_bonds_us_together

¹¹ <https://www.history.com/topics/black-history/segregation-united-states>

¹² <http://www.inquiriesjournal.com/articles/1402/the-impact-of-music-on-emotion-comparing-rap-and-meditative-yoga-music#:~:text=If%20music%20has%20such%20a,possibly%20leading%20to%20exasperated%20behaviors.>

¹³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4497787/>

¹⁴ <https://onlinelibrary.wiley.com/doi/10.1111/j.1468-2885.2007.00296.x>

brought black artists and musical traditions to all races, diminishing social segregation. It empowered individuals to challenge societal norms and break traditional and conservative social norms. This music is further used to advocate for civil rights, protests against wars, and shed light on inequalities. Without rock and roll, cultural attitudes towards the authority and social norms would have gone another path, and the sense of unity and belonging among different races would have never been fostered the same way rock and roll has done.

V. CONCLUSION

Music has significantly changed the course of history. Music is the foundation for language, transcends social and cultural barriers, and has the power to shape the essence of who we are. Music's roles and influences on history are pivotal in altering, shaping, and shifting human's communication, experiences, societal dynamics and evolution. *Ring it on. Let us see where the next thrum of beat brings us to.*