











# LEAD ME Winter Training School Madrid 2021

Media Accessibility Training: Sign Language and Subtitling for the Deaf and Hard-of-hearing















D/deaf people's conceptualization of sound and music: Implication for Learning Subtitling for the Deaf and Hard of Hearing.

Ana-Laura Rodríguez-Redondo *Universidad Complutense de Madrid antrodri@ucm.es* 

#LEADMEMadrid2021





- Introduction
- Function and relevance of Sound/music subtitles
- The Deaf cultural community
- Deaf musical background
- Heterogenous perceptions of music
- Relevance, heterogeneity and SDH: Something to think about







#### INTRODUCTION

#### Goal

To explore:

The conceptualization of sound (sound and music) in the Spanish D/deaf community

The possible implications of that conceptualization for Subtitling for the Deaf and Hard-of-Hearing.







#### **Approach**

Lexicographical onomasiolagical approach

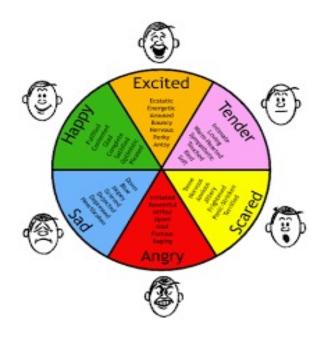


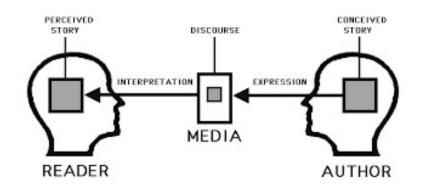
# FUNCTION AND RELEVANCE OF SOUND/MUSIC CURPEAN COOPERATION **SUBTITLES**

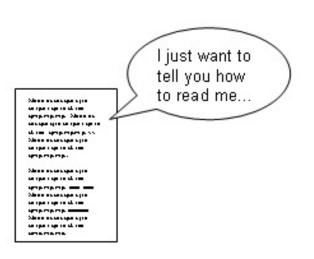




#### Sound subtitles, What for?







#### **RELEVANCE**





what are other words for relevance?



relevancy, pertinence, bearing, applicability, application, significance, appropriateness, importance, connection





Watch this video without sound. Apart from the character's wording. Which sounds/music would you include in the subtitles?

















#### Reconfortante: que reconforta (RAE) (that comforts)

#### Synonyms:

Alentador (encouraging)

Tranquilizador (reassuring)

Tranquilizante (calming)

Confortante (comforting)

Gratificante (gratifying)

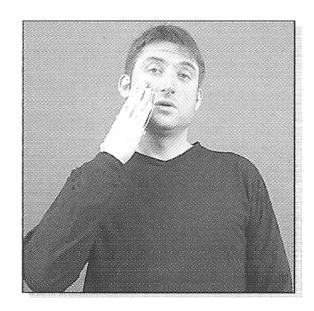
Refrescante (refreshing)

Satisfactorio(satisfying)

Estimulante (stimulating)

- Confortar (comfort)
- Dar vigor, espíritu o fuerza a alguien
  To provide someone with vigor, high spirits or strength
- Animar, alentar, consolar a una persona aflijida To cheer up, spur, console a person's feelings of grief or distress











# Agradable/Nice





Placer/Pleasure







# THE DEAF CULTURAL COMMUNITY Cultural Linguistics

"A cultural group is not a collection of a number of individuals who live in a certain area, but rather people who more or less conceptualize experience in a similar fashion"

(Sharifian 2011:26)



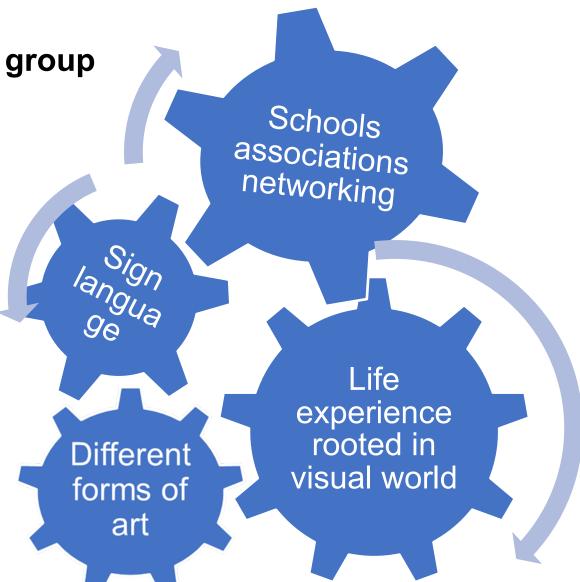


Funded by the Horizon 2020 Framework Programme of the European Union

Deaf community as a cultural group

Cultural and linguistic minority

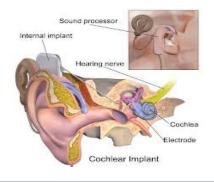
(Pérez de la Fuente 2014)



# Deaf community framed in different ways (Moredo Pereira 2020:26):













#### MEDICAL MODEL

Deaf people as individuals that own defective bodies that need rehabilitation.

#### **SOCIAL MODEL**

Deaf people as individuals in need of adapted social structures to overcome their impairments.

# CULTURAL MODEL

Deaf people as members of cultural-linguistic clusters.

# **BIOCULTURAL** MODEL Deaf people as individuals having specific physical and cognitive abilities as well as belonging to cultural linguistic minorities.





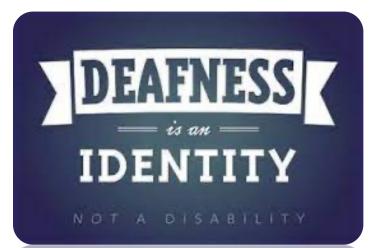


#### Deaf and music relationships

- Music and Deaf people relations perceived as negative because of the idea of deafness and inability for sound perception
- > Deaf people rejection of music because:
  - Of the imposition of hearing perceptions of music as the norm for music perception (Cruz 1997).
  - "disillusioning experiences of oral education" (Marcus 2001:34): frustration and withdrawal
  - The association between music and oral rehabilitation practices: rejection of music and music as a taboo (Lloyd 2017).



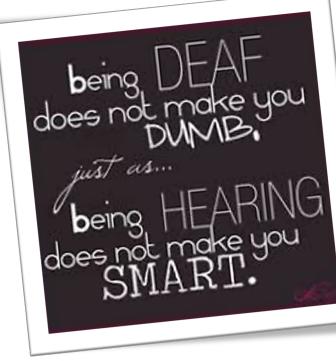




NOT A DISABILIT

























Ponto 3 Power Ponto 3 SuperPower



















### **VIDEO: MUSIC TO FEEL WORKSHOP (FROM**

**MINUTE 0:00 TO 0:48)** 







# VIDEO: EXCERPTS FROM CHARLS KRAUEL (FROM MINUTE 3:08 TO

<u>5:20</u>

#### **Deaf musical learning**





**VIDEO: ASL PERCUSSION (FROM MINUTE 0:00 TO 0:03)** 







### Percussion signing music (Vally and Lucas 2000: 191-2)

- Instrument: a bass drum.
- Manner: beat rhythmic vibrations that Deaf people can feel while a performer signs with the beats.
  - The beats are linked to the movements of the signs.







### Percussion signing music (Loeffler 2016)

- Created out of rhythm.
  - Rhythm: vital component of music.
    - Cognitive resource:
      - Mnemonic force for encoding knowledge.
      - Tool to train motor coordination.
        - Rhythm is visible and then felt in body movement.
  - Rhythm: allows for synchronization of different human behaviours.







# VIDEO: GALLADUET UNIVERSITY'S BISON SONG TEAM 2005-2006







#### > Bison song shows that:

- > Deaf people create music collectively together.
- Music is created through:
  - Visual sign rhythm and tactile rhythm provided by the drummer.
  - > The interplay between the drum and the silence.
- > Percussion signing music is:
- The indigenous music of the Deaf Culture (Loeffler 2016)
- > Percussion signing music represents:
  - The embodiment of Deaf music(blend of visual and tactile aspects of music)

Rhythm becomes a coded cultural beat (Loeffler 2016:773)











D-PAN (Deaf Professional Arts Network)









"I used normal hearing aids which were more of a hindrance due to the fact they boosted the sound but did not give clarity. It was better for me to remove the aids in order to hear less through the ears but hear more through the body" (Glennie. 2019:3)



VIDEO: How do Deaf people Experience music? AJ+ (FROM MINUTE 2:47 TO 4:00)



**VIDEO: WHAT'S A COCHLEAR IMPLANT FROM** 

"Hearing...but not as you know it. (From minute 1:33 to

6:17)







- Hearing music through cochlear implant: beat learning through repetitive tactile vibration feeling.
- Cochlear implants' goal: understanding of speech and non-verbal sounds
- Music has different spectral qualities than speech sounds
- Music has broader frequency ranges than speech

(Hiraga and Hansen (2013:29)

- Not all music has to be heard through the ear (Torres 2019:21)
- If a person loses one sense, the rest of the senses improve through brain plasticity (Tokuyama 2017)
- The sense of hearing is expanded to the sense of touch (Neary 2001)
- Plus, the sense of vision

# **Music and the brain**

Playing and listening to music works several areas of the brain



#### Corpus callosum:

Connects both sides of the brain

**Motor cortex:** Involved in movement while dancing or playing an instrument

**Prefrontal cortex:** 

Controls behavior, expression and decision-making

Nucleus accumbens and amygdala:

Involved with emotional reactions to music

SOURCE: Music for Young Children

#### Sensory cortex:

Controls tactile feedback while playing instruments or dancing

to sounds ceives and respectives to sounds ceives and

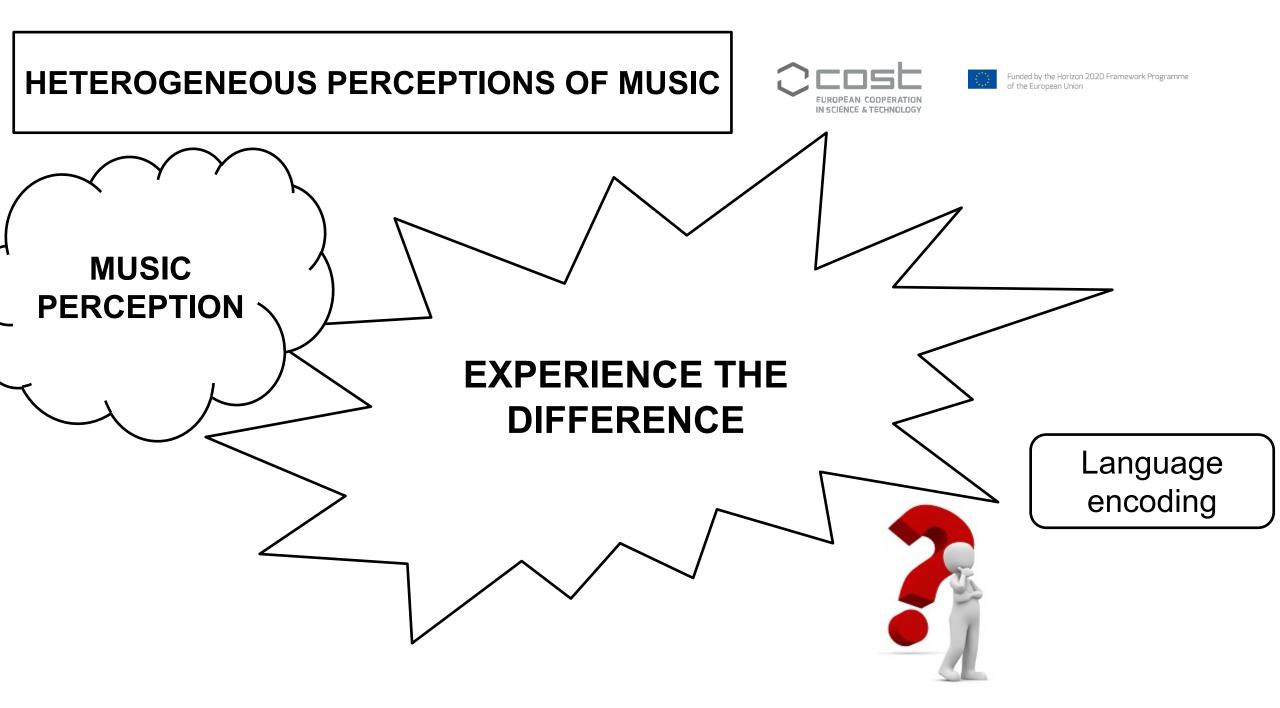
Hippocampus: Involved in music memories, experiences and context

Visual cortex: Involved in reading music or looking at your own dance moves

in movement while dancing or playing an instrument, as well as emotional reactions

DESERET NEWS GRAPHIC

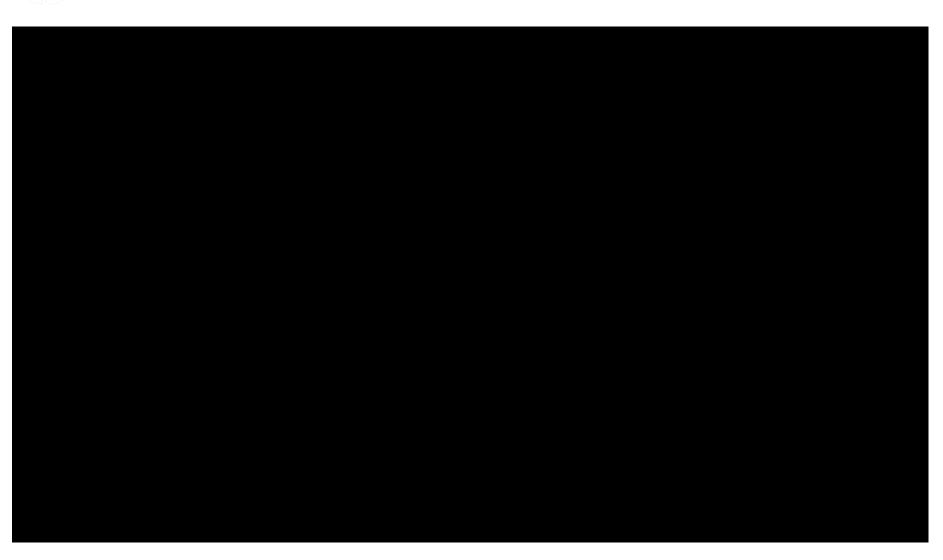
O



# Agora: how would you describe this music?







#### Música árabe/Arab music

Música romana/Roman music

Música de oriente medio /Middle East music

Música oriental / Oriental music





Student's heterogeneous descriptions: heterogeneous cultural experienced perceptions?

Música étnica/Ethnic music

Música exotica / Exotic music

Música celestial / Celestial music

Música mística/ mystic music

Música misteriosa de fondo /

Misterious music at the background

Música siniestra /scary music

Música antigua / ancient music

Música de misterio / mystery music

Música intrigante/ /

intriguing/fascinating/scheming music

Música religiosa /religious music

Música sinfónica y étnica / Symphonic and ethnic music

Instrumental music / Instrumental music







#### Which is the visual rhythm of Oriental music?

Música árabe/Arab music

Música romana/Roman music

Música de oriente medio /Middle East music

Música oriental /Oriental music

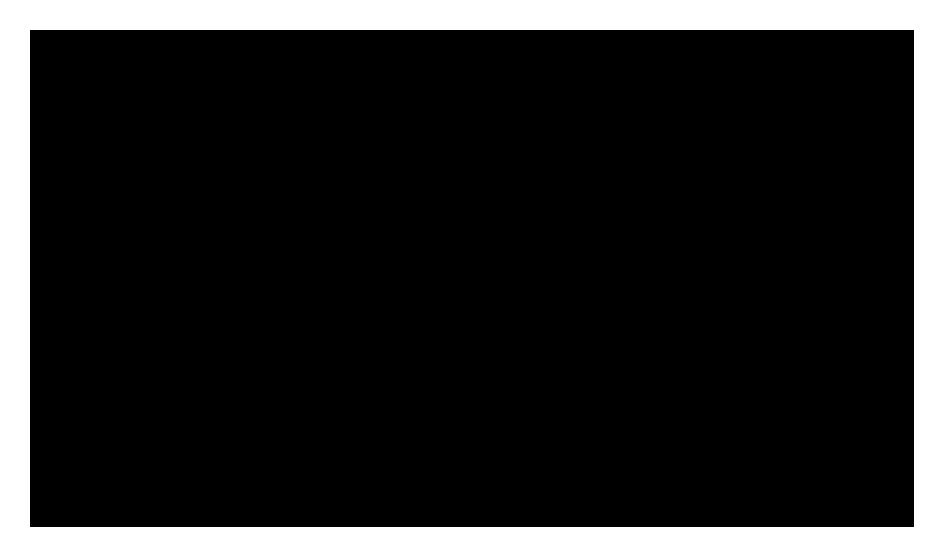


LEAD ME Winter Training School Madrid, 15-17 November 2021



LEAD ME Winter Training School Madrid, 15-17 November 2021









LEAD ME Winter Training School Madrid, 15-17 November 2021



LEAD ME Winter Training School Madrid, 15-17 November 2021

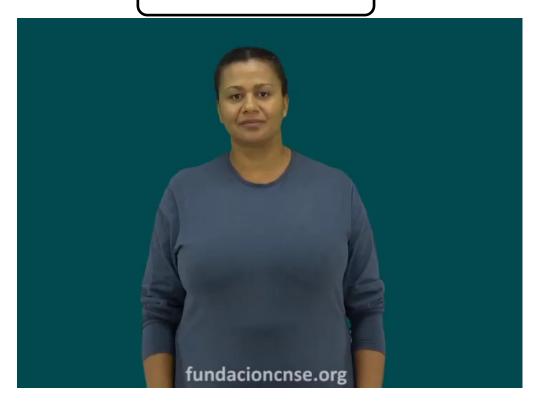


#### **Answers of 2 students out of 75**

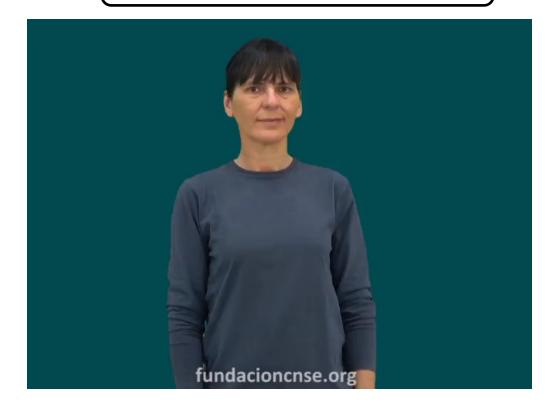
Música tranquila /tranquil/calm music

Música suave /soft music

**LSE Soft** 



## LSE Tranquil/Calm

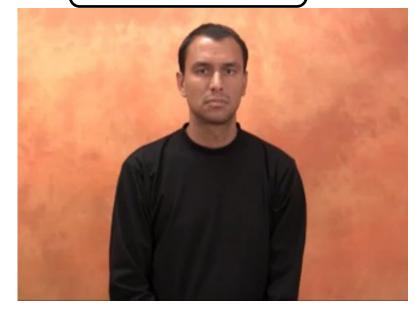




# Música tranquila /tranquil/calm music Música suave /soft music

#### **Different in ASL**

**ASL Soft** 



**ASL Calm** 

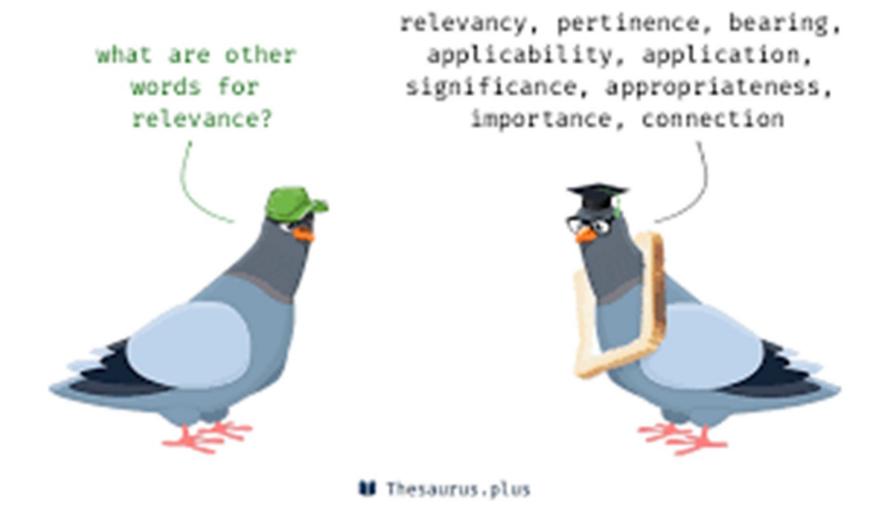


**ASL Tranquil** 



### Relevance, heterogeneity and SDH: Something to think about





#### **AGORA**

Funded by the Horizon 2020 Framework Programme of the European Union

How relevant is the description of music in this part?

Does it contribute to convey emotional, narrative or metatextual meanings?

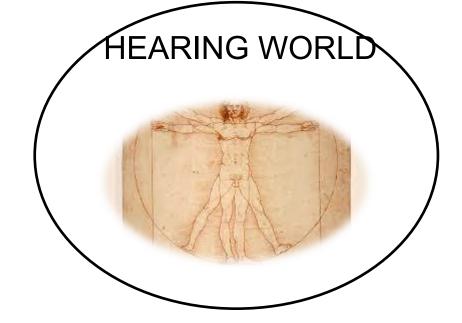
[MUSIC]

2-DEAF PEOPLE ARE **IGNORED** 

1- NO GOOD

**SUBTITLING** 

NO 13/75



16/75













## Thanks for your attention!







#### References

Aleksandrowicz P., 2020. Can Subtitles for the Deaf and Hard-of-Hearing convey the Emotions of Film Music? A reception study. *Perspectives*, 28(1): 58-72.

Baijal A., Kim J.,. Branje C., Russo F. and Fels D. I. 2012. Composing Vibrotactile Music: A Multi-sensory Experience with the Emoti-chair. 2012 IEEE Haptics Symposium (HAPTICS). Vancouver, BC, Canada. 509-515.

Centero de Arce F. 2016. Identidad y Cultura Sorda. Retrieved from: < http://www.anthropologies.es/comunidad-cultura-sorda/>

CNSE 2016a. Editorial. El Faro del Silencio. 256: 3.

CNSE. 2016b. Manifiesto de la CNSE en el Día Internacional de las Personas Sordas 2016. Retrieved from: < <a href="https://www.cnlse.es/es/virtual-library/manifiesto-de-la-cnse-en-el-d%C3%ADa-internacional-de-las-personas-sordas-2016-v%C3%ADdeo">https://www.cnlse.es/es/virtual-library/manifiesto-de-la-cnse-en-el-d%C3%ADa-internacional-de-las-personas-sordas-2016-v%C3%ADdeo</a>

Cruz, A. 1997. An examination of how one deaf person constructs meaning in music: A phenomenological perspective (Publication No. 9809933) [Doctoral thesis, The University of Tennessee]. ProQuest Dissertations and Theses Global

Darrow A. A. 1993. The Role of Music in Deaf Culture: Implications for Music Educators. *Journal of Research in Music Education*, 41:93-110







- Darrow A. A. 2006. The Role of Music in Deaf Culture: Deaf Student's perception of Emotion in Music. *Journal of Music Therapy*. 43 (1): 2-15.
- Fawkes, W.G. 2006. The Teaching of Music to Hearing Impaired Children and Teenagers. Retrieved from: <a href="http://www.maryharehistory.org.uk/articles/fawkes/">http://www.maryharehistory.org.uk/articles/fawkes/<a href="fawkes\_2006.pdf">fawkes\_2006.pdf</a>>
- Glennie, E. 2019. Technology questions. Retrieved from: <a href="https://www.evelyn.co.uk/wp-content/uploads/2019/11/Evelyn-Glennie-Technology.pdf">https://www.evelyn.co.uk/wp-content/uploads/2019/11/Evelyn-Glennie-Technology.pdf</a>
- Gouge P. 1990. Music and profoundly Deaf Students. British Journal of Music Education. 7(3): 279-281.
- Hiraga, R. and K. Hansen. 2013 Sound preferences of persons with hearing loss playing an audio-based computer game. MDPI 201. Pp.25-30. Retrieved from :
  - https://dl.acm.org/doi/pdf/10.1145/2505483.2505489?casa\_token=FX7bymnO8OkAAAAA:8mSYSt1pU5qly\_svZr Az9IRct8AfFKQFmEwIWdGCcQNOr51i86Sx6VklRYJo9pjcQuJoDDkL7njx
- Ladd P. 2003. Understanding Deaf Culture: In Search of Deafhood. Clevedon: Multilingual Matters.
- Loeffler, S.C. 2016. Rhythm, Stories and Songs, Signed. In G. Gertz and P. Boudreault (eds.). *The SAGE Deaf Studies Enciclopedia*. Pp. 771-773.







- Lloyd, A. 2017. Music's role in the American oralist movement, 1900-1960 (Publication No. 10680551) [Master's dissertation, Arizona State University]. ProQuest Dissertations and Theses Global
- Marcus, H. 2001. Music For All?: An investigation into the value of music for deaf people [Unpublished master's dissertation]. University of Sheffield
- Marshall S. and Helsel J. 2003. Culturally Sensitive Audiologic Protocol with Culturally Deaf Children. *Perspectives on Communication Disorders and Sciences in Culturally and Linguistically Diverse Populations*. 9(1):9-12.
- Moredo Pereira, J. 2021. Deaf on stage: The cultural impact of performing Signed Songs. Doctoral thesis (Ph.D), UCL (University College London). Retrieved from: <a href="https://discovery.ucl.ac.uk/id/eprint/10122838/">https://discovery.ucl.ac.uk/id/eprint/10122838/</a>>
- Nascimento A.K.P.D., 2017. Translating Sounds into Words in Subtitles for the Deaf and Hard of Hearing: A Corpus based Approach. *Trabalhos em Linguística Aplicada*. 56(2): 561-587.
- Neary, W. 2001. Brains of Deaf People Rewire to 'Hear' Music. *UW News, University of Washington*, Retrieved from: <a href="https://www.washington.edu/news/2001/11/27/brains-of-deaf-people-rewire-tohear-music/">https://www.washington.edu/news/2001/11/27/brains-of-deaf-people-rewire-tohear-music/</a>
- Neves J. 2007. Music to my Eyes... Conveying Music in Subtitling for the Deaf and the Hard of Hearing. In Łukasz Bogucki and Krzysztof Kredens (eds). *Perspectives on Audiovisual Translation. Intermedia 2007. Conference Proceedings.* Frankfurt am Main: Peter Lang. 124-144.







Sacks O. 1990. Seeing Voices. A Journey into the World of the Deaf. New York: Harper Perennia

Sandberg M. W. 1954. Rhythms and Music for the Deaf and Hard of Hearing. Volta Review. 56(6): 255-256

Schmitz A., Holloway C. and Cho Y., 2020. Hearing through Vibrations: Perception of Musical Emotions by Profoundly Deaf People. *arXiv preprint arXiv:2012.13265*.

Sharifian, F. 2011. Cultural conceptualization and Language. Amsterdam/Philadelphia: John Benjamins.

Tokuyama, D. Supersensors: How the Loss of One Sense Impacts the Others. *Wu Tsai Neurosciences Institute, Standford University,* 9 May 2017, https://neuroscience.stanford.edu/news/supersensors-how-loss-one-senseimpacts-others

Tranchant P., Shiell M.M., Giordano M., Nadeau A., Peretz I. and Zatorre R.J. 2017. Feeling the Beat: Bouncing Synchronization to Vibrotactile Music in Hearing and Early Deaf People. *Front. Neurosci.* 11:507

#### **Dictionaries**

Dilse. Diccionario de la lengua de signos Española. <a href="https://fundacioncnse-dilse.org">https://fundacioncnse-dilse.org</a>