THE RELATIONSHIP BETWEEN MUSIC AND LANGUAGE:

CAN TEACHING WITH SONGS RESULT IN IMPROVED

SECOND LANGUAGE LEARNING?

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Abstract

It is commonly asserted that music/song can be helpful in the acquisition of many aspects of language including vocabulary, grammar and pronunciation. A review of available literature, however, suggests that there is very little empirical evidence to support these claims. The present thesis will review this literature and then propose a hypothetical experiment designed to shed light upon the question of the effect of music/song on second language learning. This experiment specifically proposes to examine the acquisition of subordinate clause word order in German, comparing conditions in which music/song is used versus when it is absent from the lesson. The thesis will also discuss possible avenues of future research regarding the question of whether using music/song in the foreign language classroom leads to more effective second language learning.

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How can music be used to promote learning in a second language acquisition environment? Whether it's Queen's *Bohemian Rhapsody* or Rammstein's *Du Hast,* most people have had songs stuck in their heads. Sometimes they forget the words, even in their native languages. If those songs were poems once read aloud in an English class somewhere, would they remember them so well? Since people listen to music/songs so often, they tend to recall the words and topics of the songs. Whether or not we completely understand it, we experience it.

Using music in the classroom could be more than just a fun, engaged atmosphere. It could possibly assist in accelerated, long term acquisition of a language. First, I'm going to present a literature review, showing that there are a lot of educators who believe they have witnessed this possible benefit first hand in their classes. A number of published articles, many of which are pedagogically focused, claim to support this idea that music helps students learn a second language. Second, I'm going to present a shorter literary review over research articles that present empirical data in an attempt to answer this question. I'm going to summarize these articles and their significance to my question. I will lastly present a proposed experiment, its significance and recommendations for further research in this area.

Literature Review: Pedagogy Articles

I picked these articles to show how music/songs are used in different areas of the world to assist in the teaching of various foreign languages. Many have caught on to this possible connection between music and increased foreign language learning success. Teachers all over the world, speaking many different languages claim that music is helpful in this way, based on their experiences. I wanted to show that this is a common practice, but it is not fully understood by those who use it.

"Advanced French Conversation through Popular Music" (Leith, 1979; see Table 1: Article 1)

The first article by Leith is over teaching high school and university level French culture, phonetics and pronunciation with music. It is suggested to be used for teaching phonetics at any level, but since pronunciation in French is different when sung than when spoken, this might be seen as a drawback to using music to teach. However, it is argued to be an effective way to teach culture. Despite possible drawbacks, this educator used the text of the song for instruction in difficult aspects of pronunciation by omitting words and word endings. The educator has observed this to be effective, resulting in less frequent errors. However, an empirical study was not done showing how often this was helpful, or to which students and at what levels. He also notes the limited availability of textbooks which include music or music exercises, and "that those that exist tend to overcomplicate the accompanying activities" (Leith 1979).

This article is quite dated (1979), referring to using tapes vs. record players. It also included complaints regarding the difficulties of obtaining popular music and lyrics (Leith 1979). This is an outdated problem showing that one main reason music hadn't

been widely used in language courses was due to this lack of availability, not a lack of interest or desire on the part of the instructor. We now have access to music and lyrics with ease in various mediums, often for free. The educator also discussed the inconveniences of manually taking out endings of words on paper to be replaced by the student. This is surprisingly simple today and is often done by many educators that have chosen to use music in the classrooms, as I've seen from personal experience. With such resources, there is little excuse not to utilize fill in the blank lyric sheets for word endings or to discuss cultural meaning and pronunciation with YouTube lyrics and videos from modern French songs, like Stromae.

"The Role of Music in Second Language Learning: A Vietnamese Perspective" (Schiffman, 2008: see Table 1; Article 3)

This article by Schiffman (2008) reviews a small study on music being used in the English as a foreign language classroom of Vietnamese students and exposure to western culture overall. It can then be inferred from the article, that the educators in Vietnamese culture prefer to have a more formal teaching and learning environment, thus contributing to the rejection of the use of popular music in their English classrooms.

The study addressed only opinions and perspectives provided by the students and educators in the form of interviews and pertaining to this use of music in the language classroom and learning English as a second language in general. "Both teachers and students in the interviews agreed that music was helpful to learning English" (Schiffman 2008). The interviews produced a good list of the major reasons that music is considered useful in learning the English language, but these are solely their opinions and are not backed by controlled examinations of these effects. In some of the interviews a concern

for student exposure to western cultural aspects was discussed. The study suggests that a line has been drawn between language and music in the Vietnamese English classrooms, and that they do not wish to bring western music into the curricula of English learners due to these perceived cultural differences.

This suggests that one problem with using music in the foreign language classroom in Vietnam is not the music itself, but the refusal or inability of the traditional Vietnamese teaching methods and culture to explore possibility of the music-language connection in their lessons. This may be the case in other cultures as well.

This article shows how different cultures across the world actually fight for the use of music in their language classrooms, and think it might be useful, but aren't yet concerned as to whether or not it actually benefits learning different aspects of language. Based on a survey presented in this article, music was said to have helped students' moods and motivation, as well as enhance the understanding of another culture. However, these effects may not have been widespread or mutual across groups, and no examination of these effects was suggested. The author notes that one main problem is the lack of research done in this area of study, displaying a desire for empirical evidence. This is a main problem I am trying to address in this paper.

"Beyond the Glockenspiel: Teaching Race and Gender in Mozart's Zauberflöte" (Howards, 2014; see Table 1: Article 4)

In his article, Howards (2014) suggests using opera to teach primarily German culture to university level German students. This educator advocates for the use of this less commonly appreciated art form saying that, "For most students, this genre still remains far removed from their contemporary world and interests. The goal in the

culturally-centered language classroom, then, is to bridge opera with the students'

modern world" (Howards 2014). The focus is on the opera *Die Zauberflöte* and how its

controversial nature can teach students about gender and race, both historically and

culturally.

This specific opera deals with an older time period, as each character represents

different aspects of racism and cultural problems of the time. This helps with teaching

culture and is said to be comparable to pop and hip hop in addressing racial issues. This

proves a historical as well, but the lyrics can also be used for lower level vocabulary

acquisition dealing with appearances and definite articles. Another unusual aspect is the

music style. The unusual sound and feel of opera in a modern language classroom can be

tough to work with, but this aspect is used to teach culture (Howards 2014). The educator

notes that, even though students might react disrespectfully to the genre, it makes it

memorable and teaches a culture with which they are unfamiliar. Since the performance

is emotional, the activity questions are based on that aspect, before the students know

what is being said (Howards 2014). This is a way to ease the students into a new genre

and culture, and can help with critical analysis and more open minds, in my opinion.

It is important to note that this educator is recommending ways in which to use

music in the foreign language classroom that has worked for them, in their professional

opinion and experience. Whereas this is a great suggestion to fellow educators, my

question was no addressed.

"Modern Classics: Reflections on Rammstein in the German Class" (Lüke, 2008; see Table 1: Article 5)

Another German instructor, Martina Lüke (2008), uses the works by *Rammstein* to teach literature and grammar in the high school language classroom. This is considered an industrial or metal band that often sings lyrics deemed inappropriate for some classroom levels, but according to Martina Lüke, some of their lyrics have a connection to classical German literature. For this reason, she believes it should be added to German class curricula. "Erinnerung an die Marie A." by Bertolt Brecht can be strongly connected to their song "Nebel". Another song called "Dalai Lama" is an edited form of Erlkönig by Goethe, and "Hilf mir" is an interpretation of a classic German children's story called story "Die gar traurige Geschichte mit dem Feuerzeug" (Lüke 2008).

She also notes the usefulness in comparing these texts to the original in grammar lessons, due to the word plays and double meanings found in the German language. "For example, the ugly girl's face in the mentioned song "Morgenstern" is entitled "Ungesicht," which is a wordplay of "Angesicht" (face) and the negative prefix "un-," which indicates that something is wrong" (Lüke 2008). She also offers some personal recommendations for the use of these texts in classes.

These are examples for use in German. These literary pieces and the characteristics of the language being presented in popular music being used in the classroom is something I wish to examine. It's good that she has found these methods to be helpful, at least in a lesson planning situation, but we need to see if it is actually helping students with language learning. I am looking for evidence.

"Using Music to Promote L2 Learning Among Adult Learners" (Abbot, 2011; see Table 1: Article 6)

This article by Abbot (2011) serves as a guide to educators of ESL in deciding which songs to choose to help teach word order and vocabulary in English and why they should choose which songs for their students. This shows more educators are implementing this idea into their curricula and are starting to examine important aspects. One aspect discussed is the level of difficulty regarding the texts presented by songs. Marilyn Abbot states,

"Some factors to consider when selecting a song are tempo, clarity of vocalization and enunciation, stress, amount of repetition, language level, word order, vocabulary, and the extent of metaphorical usage. All these factors determine whether the song will provide meaningful, understandable input for learners" (Abbot 2011).

A unique part of this guide is the separation of music categories. This is most likely to help the educators in lesson planning, and choosing the best song possible. She uniquely identifies listening, rhythmic speaking and sing-alongs as three different distinct uses with their own strengths in different situations. Speaking is said to be easier for students who are uncomfortable with singing in class. She then separates singing activities into 3 categories: Using actual songs, using familiar melodies with simpler lyrics, and creating original songs and lyrics. She is a big advocate for the third aspect, but not all new educators might be. The second aspect appears to be quite common as educators try to come up with things like mnemonics for grammar rules in class. (Abbot 2011)

Here is a table of suggestions from Abbot's article regarding level of difficulty using various types of music:

Fig. 1 (Abbot 2011)

Table 2: Language Tasks That Can Be Used With Various Levels of Audibility of Recordings (Dougill, 1994, p. 189)

Recording Audibility	Language Task
Difficult text, difficult to hear	Reading comprehension with music used as an extra dimension
Difficult text, easy to hear	Limited listening practice (e.g., gap filling [cloze exercises]), followed by reading comprehension
Easy text, difficult to hear	Predictive gap filling with listening to confirm
Easy text, easy to hear	Listening comprehension questions; partial or whole dictation

This article serves as a concise guide for the educator wishing to implement songs into their language classroom, but does not provide them with evidence as to whether it is effective in their students' learning, even after careful selection of the music.

"Teaching Hispanic Culture through Folk Music" (Griffin, 1977; see Table 1: Article 7)

In this article, Robert Griffin suggests the use of music to aid in teaching culture in Spanish classes, but also notes possible negative effects of it. He proposes a two year cultural course plan, and integrates folk music into teaching Hispanic culture. He advocates highly for the use of music, primarily folk music, in teaching culture due to two main characteristics: students enjoy the activity and it is a shared cultural experience (Griffin 1977). He notes that, "It is all too easy to capitalize on the inherent appeal of the occasional song tossed in…to distract students from…grammar and pattern drills. This is what I call the 'song-and-dance method'" (Griffin 1977). However, it is this attitude that he warns could re-enforce students' stereotypes of the culture or make it seem too Americanized. In short, he gives the unique concern for choice of song, cautious that the style choices could backfire as a tool for cultural learning.

The primary goal of this paper was Griffin's desire to propose his two year course plan and introduce available textbooks for use with that plan. There was only one statement related to him personally using music in a classroom, and it did not give any details about the class or level. He also seems to be making a case for culture as opposed to language components, but does not address any language components at all. Though he claims that music has a potential value (Griffin 1977), any actual effects on the students acquisition of the language form using this proposed method, or any other involving music, was not addressed or discussed.

"Justified and ancient: pop music in EFL classrooms" (Domoney and Harris, 1993; see Table 1: Article 8)

This article by Domoney and Harris (1993) is over a teaching workshop, which dealt with how educators could integrate pop music into the EFL classroom. In this situation, it was the educators who were asked to do activities. One activity involved reactions to the music and the second was a worksheet analyzing opposites in the song. The idea was to have one person in the group monitor the others for language use.

This is a different approach that I feel might have some disadvantages, but could be useful for shy students who like to listen first. This position in the group could be exploited by students who are too afraid to talk, and avoid talking as much as possible. It would be best to make sure students switch positions or get adequate speaking practice, even if they feel they need to listen more at first.

Another important point pertained to "the question of songs that had 'bad' grammar or unnatural stress. It was pointed out that these were features to be exploited through types of correction or translation rather than be avoided" (Domoney and Harris

1993). They categorize slang and other difficult aspects of language as simply another learning tool to make students more comfortable with a language. I have personally witnessed and experienced how giving an explanation about these unusual facets of a language can be more motivating than avoiding it.

These suggestions are still based on experiences by educators. Seeing that it can be effective and enjoyable is good, but we want to know if it works and what aspects of these songs are getting through to the students' understanding of the language.

"Music as Means To Enhance Cultural Awareness and Literacy in the Foreign Language Classroom." (Failoni, 1993; see Table 1: Article 9)

According to Judith Weaver Failoni (1993), music can be used as a means to teach foreign language learners about new cultures and mainly phonetics in American language classrooms. She claims that "there is probably not a better nor quicker way to teach phonetics than with songs. Phonetics instruction is one good use to which songs can be put even in beginning classes" (Failoni 1993). She wishes to discuss various methods of using music for cultural aspects, literacy and communication skills, and is focused on these methods; not their effects on the students learning.

She also says, "Music may allow a teacher to introduce a more advanced text through music because, unlike spoken conversation, there are pitches and melodies, rhymes, and beats and measured phrases, that may help students remember vocabulary or grammatical structures and aid in comprehending the general meaning" (Failoni 1993). She also warns against the choice of music, which might confirm or introduce a stereotype. This was also noted in another article, and thus seems to be a more common concern. In her conclusion, she notes that "…music provides teachers with a resource to

accommodate students' interests…" (Failoni 1993). This shows that her focus is more on how educators can use it in their lessons than how it actually affects students learning.

She makes many claims in her article about how music activities help strengthen various language skills, but provides no evidence or references for these claims. She does not explain how it is used in her own classrooms or what languages, but provides French song examples. She even notes that "popular songs may present problems for the teacher because of…more advanced grammatical structures" (Failoni 1993). If this is in accordance with a specific language, such information should have been provided in this text. She gave a lot of advice, with little support, and warned against using songs with more advanced grammatical structure. For my purposes, this article shows that more research needs to be done.

"Enhancing Acquisition Through Music" (Lake, 2003; see Table 1: Article 12)

This article is from Lake (2003), who has used music to teach English pronunciation to young students for 10 years. He claims that students often come to class feeling alienated and uncomfortable in foreign language classes. He also describes the positive effects of a comfortable, safe environment for new immigrants to adapt that can be created by music.

He "found that students are more willing to negotiate meaning within the circular structure of a song than in simply reading a passage" (Lake 2003). One interesting claim he makes is that "the music carries you along into the text whether you are ready or not." I find this to be quite an important aspect of music versus reading in the classroom.

Students may trip over words without aural input, but with music, they can hear the words and pronunciation, and after hearing it, they can better decipher how it is written. This goes back to the idea of having both aural and visual aids in learning language.

One important tip he offers is to refrain from interfering and let the students sound out and figure words out on their own. Also, "introduce song as a whole" and "play it through several times" but "encourage students to respond…in any way they might enjoy. He says "the natural sequence is to learn a tune before the words" (Lake 2003). I have seen and noticed in other articles that this is not a common practice, but that it is done both ways: before and after presenting the text. I'd like to see which is more effective. Another point was that one should "never force a student to sing" (Lake 2003). I'm not sure if this is very helpful, as he says they should be encouraged to respond. If they simply don't respond, I feel it's the educator's duty to convince students to join in or create the right environment for that to occur.

In the article, experience based evidence and responses are presented. Lake (2003) asked an advanced student of his to "write down a summary of how the music approach helped". The student's response is presented in Fig. 2 below:

Fig. 2 (Lake 2003)

Music
- Helps with pronunciation.
- Helps with understanding the vocabulary out of the context.
- Lets see the beautyness and variety of the English language.
- Lets get more interest at the English language.
- Lets feel success after many repeating of the songs.
- Improves the solidarity feeling of the class.
- Offers the possibility to learn more about the American country (either because of the names in the words or because of the thoughts).
- Furthers the acoustic learning so that the student understands the American people better.
- Helps with grammar.

There was an attempt in this article at gathering feedback data regarding the effects of using music in the classroom. This shows that, based on experience, opinion and student response, music boosts student morale and cultural understanding. However, these statements are not backed up by provided evidence.

A "The Use of Songs in Teaching Foreign Languages" (Jolly, 1975; see Table 1: Article 10)

This was written by Jolly (1975), a Japanese educator who has used music in her conversation lessons for three years. Her goal with writing this paper was to "state a case for the more extensive use of songs in foreign language teaching" (Jolly 1975). She discusses the relationship between speech and song as it is reflected in the Japanese language and culture. The paper concisely asserts that songs can be used as teaching material and also as a method of language acquisition.

Jolly used songs appropriate to what was being studied in her classes (roughly 15 to 20 students), and asked them at the end of each semester to complete a survey. They "were asked to rate songs according to their usefulness" (Jolly 1975). The students responded that "the songs created a relaxed and enjoyable atmosphere…and livened up the pace of the lessons. …They were also viewed by most students as…increasing vocabulary, studying Japanese culture and…the relationship between culture and language" (Jolly 1975). She claims that "songs are also effective in reinforcing course features, such as…pronunciation, grammatical structures, vocabulary and Idiomatic expressions, and cultural exposure" (Jolly 1975).

She provides explanations as to why she believes this, but it is based on her personal knowledge and experience. Thus, she supposes that it works. The majority of

her paper are suggestions about what to use music for in her classrooms and gives these personal explanations. Besides the class evaluations/surveys given at the end of the semesters, she does not provide any empirical evidence supporting using music in the classroom.

She suggests in terms of song choice that the songs "should not contain unfamiliar grammatical structures, nor grammar or vocabulary not within association of" previously presented material. Also they should not contain unusual pitch jumps or subjects not appearing in the main textbook" claiming this could confuse comprehension (Jolly 1975).

I find this is unavoidable, but I also feel that students won't be distracted by the unfamiliar words since they will be focusing on the words or grammar structures presented in the lesson being given at the time. I agree with the idea of not using ridiculous jumps in pitch, as most students could feel awkward if it's too high or low for them to sing, and could hinder participation rather than encourage it. It might actually be beneficial to have exposure to the more colloquial elements of the language, since the textbook version of a language is not always what is spoken natively. I feel that students should definitely be aware of and exposed to these elements, and would benefit from it.

Jolly (1975) claims that music is useful in many areas of language teaching and that "there is little doubt regarding [its effectiveness] in…maintaining the students' motivation…". However, the only evidence she provides is student feedback. Whereas this may be the most important feedback, that students are noticing benefits from using music in the language classroom, empirical evidence is not provided.

Conclusion of Pedagogy Articles

Since before materials were readily available, educators of all languages and levels have been attempting to integrate music into their curriculums for various purposes. Its effectiveness appears to be generally positive in creating good classroom morale. Songs are most widely used for culture, grammar rules, pronunciation and vocabulary acquisition, and results in exposure to a combination in any case. Their claims stem only from experience, and not from gathering empirical evidence. This is useful between teachers, but we want to know if it really helps students learn.

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Literature Review: Research Articles

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Summary

I've chosen these research articles because they are also trying to answer my question of the effects of music on second language learning. The two main studies by Fischer (2001) and Medina (1990) included large groups of participants that were examined over a long period of time. These articles and the evidence provided portrays the difficulties in obtaining meaningful, definitive evidence in this subject area. I also analyzed their experimental designs and used these examples in the modeling of my own experiment. The other two by Pienemann (1997) and Murphey (1990) discuss language acquisition and the effects of music on information retention. Both papers contributed to my experiment design.

"Early Language Learning With and Without Music" (Fischer, 2001; see Table 1: Article 2)

Fischer (2001) gathered evidence regarding the effectiveness of music/songs in the foreign language classroom by carrying out an experiment with two groups of

kindergarten students split into 4 classes: two classes were taught with music and two without. The experiment tested the acquisition of vocabulary and pronunciation through songs. It evaluated 80 randomly selected kindergarten students of English for 2 years, keeping the same teacher. The music group curriculum included the use of music as a teaching aid, and the other only used a read aloud book cassette. The music groups used songs for various exercises including singing, spelling and starting the day. The classes using music, did not always use English, and started with their native language, Spanish, in the first year. The other groups had a more structured, and drill oriented approach, but the teachers worked together to keep their curriculums as similar as possible.

This important study was done in 2001 on two classes of students at an elementary school learning to speak and read English as a second language. This took place during a 60-100 minute "literary block", though it does not seem the amount of time spent on music was consistent or recorded. It showed positive results that more students in the music integrated courses did better at speaking and reading English as a second language than the non-music class. The summary of the findings was, *"It is clear that the students in the two classes that used music as part of the language arts curriculum outperformed students in the two classes that did not" (sec. Fischer 2001).*

This study contributed findings to the field regarding the question of the validity and usefulness of music in the language classroom, however the teaching style, not just music, was also a factor. The music may have made the educator seem friendlier or more approachable, or the educator's personality may have made the students more interested in the music presented. "It may be that the teachers' personalities played a significant role in the outcomes of this study. However, the two teachers who used music in their

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classroom both report that music helped them maintain their enthusiasm and demeanor"
(Fischer 2001). This was addressed by Fischer in the conclusion as a possible factor for
interference with the data outcome, but also noted it was impossible to control. However,
I tried to omit this possible interference factor in my proposed experiment by using the
same teacher in both the control and treatment groups.

For children of an elementary level, the addition of music may have simply
positively affected the children's attitude and made them more relaxed to learn. This
would probably occur regardless of the teacher's approach, especially when used as the
first activity of the day. This suggests that music is helpful in the classroom either solely
as a morale booster or by giving the student exposure to the spoken language being
studied as well. However, the conclusion was that "it is unclear if the addition of music to
language arts instruction that is not tied thematically or developmentally would positively
impact student achievement" (Fischer 2001).

Even though empirical data were gathered, a firm answer regarding my question
could not be determined. I supposed the main reason for this uncertain conclusion could
be attributed to the experiment's design.

"The Effects of Music upon Second Language Vocabulary Acquisition"
(Medina, 1990; see Table 1: Article 11)

This article by Medina (1990) presents an experiment carried out on young,
second grade students of English as a second language. This experiment was not just on
the effectiveness of music on foreign language learning through vocabulary acquisition,
but also the effects of visual aid as well. This was presented in the form of pictures. An
audio book was presented to four groups of 12 students each: one was presented with the

audio book sung and shown visual aid, another had just the sung story and no visual aid, another with spoken story and visual aid and the last had just the spoken story. Medina (1990) concludes that the "results of pre- and posttests indicate no statistically significant differences between groups having music and not having music, between having illustrations and not having them, or for the interaction of the two variables. However, descriptive differences were found. Vocabulary gain scores were consistently higher for the groups in which either music or illustrations were used, and highest for the group in which both were used".

She notes that the largest increases in vocabulary were for the initially low scoring students (Medina 1990). This suggests that these methods may be more useful for students who are struggling in courses with traditional foreign language teaching methods.

For my purposes, I must compare only the data regarding the two groups with the sung story and compare this with the spoken story. Otherwise, this data is too busy and cannot offer a clear answer to my question.

"The song stuck in my head phenomenon: A melodic din in the lad?" (Murphey, 1990; see Table 1: Article 13)

Murphey (1990) presents "the song stuck in my head phenomenon". His article "deals with the relationship between: involuntary verbal rehearsal, also called the "din in the head"…It is hypothesized that song may act as a LAD activator, or be a strategy of the LAD in the ontogenetic development of language" (Murphey 1990). The LAD is referring to the theory of a "language activation device" in the brain which controls our language execution and acquisition abilities. Whereas this has not been disproven, very little can be confirmed about its characteristics. A din is defined as "a loud, confusing

mixture of noises that lasts for a long time" by the Merriam Webster online dictionary. Thus, he is referring to a buzzing in the mind of acquired language that is inherently involuntary, though he questions if it could be voluntary. (Murphey 1990)

Following this idea, Murphey (1990) says that the din "will not occur after output practice without input" and "it will not occur after pattern drills or grammar exercises." It apparently takes "at least one to two hours of good input" for the din to "startup". What this suggests is that drills are essentially not as effective as getting the language stuck in the learners mind as exposure.

The author gave a pilot questionnaire to 49 subjects who "30 native English speakers and 19 of other languages whom reported they experienced SSIMH" (Murphey 1990). He claims that pop songs may stick because "they have an extremely high verb count with few concrete referents" (Murphey 1990). From his own experience, "it is usually the melody that first becomes stuck, but EFL students have often sung lines of a song to me asking what they mean." (Murphey 1990). As a child, Murphey learned songs in Spanish, German, and French without knowing the meaning of the words and claims that, "the linguistic content does not have to be understood in the first place" (Murphey 1990). He says the widespread of English music in the world "may just be making leaning English in school easier" for students.

It is important to consider that, even in my own experience, listening to songs in other languages before knowing what they mean can help prepare students for the sounds and structure of the language. This might result in the words or sounds they hear to be partially or fully memorized before explanations are given. This could speed up the

process of connecting meaning to the word/sounds. Just listening to the music/songs a few times can be a great introduction to the sound and structure of a language.

Pienemann's Processability Theory (Pienemann, 1998; see Table 1: Article 14)

Briefly stated, Pienemann's research suggests that there is a hierarchical order according to which learners will come to understand and produce grammatical features of a second language. This hierarchical order, which Pienemann expresses in terms of grammatical processing, is different for each second language being acquired. The name of Pienemann's theory, *Processability Theory,* reflects his notion that second language acquisition essentially amounts to the gradual acquisition of increasingly complex levels of second language grammatical processing. Pienemann claims that "the resource of each lower level [of grammatical processing] is a prerequisite for the functioning of the higher level" (Pienemann 13). I have provided a simplified chart (Fig. 3) in both German and English to help the reader to better understand this theory, and its significance to pedagogy.

Fig. 3

Order	Aspect of Language to be Acquired	Explanation	Example in German and English
6th	• clause boundary	Subordinate clause, main clause and subjunctive. (In German, this requires inverted word	I can't go, because I have homework. Ich kann nicht gehen, weil ich Hausaufgabe habe.

		order.)	
5th	• Word Order Rules	Inverting word order, Ex. Putting time expression first. (Verb remains second in German.)	I was there yesterday. / Yesterday I was there. Ich war gestern dort. Gestern war ich dort.
4th	• S-procedure	Subject + Verb Agreement	The chairs are brown. Die Stühle sind braun.
3rd	• Phrasal procedures (head)	Matching plurality with nouns	One chair, two chairs ein Stuhl, zwei Stühle
2nd	• category procedure (lexical category)	Conjugating a verb	To be, I am, I was sein, ich bin, ich war
1st	• word/ lemma	Simple words	der Stuhl/ (the) chair

"The hierarchical nature of this list arises from the fact that the resource of each lower level is a prerequisite for the functioning of the higher level: A word needs to be added to the L2 lexicon before its grammatical category can be assigned. The grammatical category of a lemma is needed before a category procedure can be called" (Pienemann 13).

This hierarchy I've presented is an older version of that given for specifically the German language. Though there are updated versions, the ideas and evidence behind the theory remain consistent. To reiterate, according to Pienemann (1998) acquiring a second language means learning to process that language (i.e., to successfully understand and

produce it), and we learn to process second languages not in an all-at-once fashion, but instead in predictable increments of gradually increasing complexity, and where complexity is expressed in terms of second language linguistic structure (i.e., word and sentence structure) and ultimately in terms of success in carrying over linguistic information from one clause to another, different clause.

Pienemann's work is of interest to me because of its focus on the acquisition of syntax, and in that my proposed experiment on teaching German involves using songs to help teach subordinate-clause word order, which is a syntactic phenomenon. Pienemann's work suggests that subordinate-clause word order is acquired relatively late in the second language acquisition of German. His work also suggests that it's not possible to skip stages in acquisition. My question is whether by teaching subordinate-clause word order with songs, we might not be able to at least speed up the learning process for subordinate-clause word order relative to a method that didn't use songs.

Conclusion of Research Literature

These articles by researchers are the main contributions for empirical data, which helped me to understand their experimental procedures and any shortcomings to avoid in my own design. The review showed that while experiments investigating the use of songs and music in second language teaching have been carried out, they were not sufficient for my purposes. For my purposes, these articles leave open the question of whether music really works in this situation, what the factors are, and how effective it is when music is used in language teaching.

It is important to see in what aspects of second language acquisition music is effective and why. Thanks to Pienemann we have an idea to go off of as to why certain

songs might work for learners who are at different stages of second language development. What we still need to find out, through careful evaluation, is whether using music leads to second language acquisition.

Experiment

Not much empirical data have been gathered on the subject of a correlation between music and language acquisition. There were two main empirical studies done by researchers, but most of the articles were based on the experience of educators. The results gathered from the research articles were inconclusive or not relevant enough to my question. Vocabulary was primarily explored. Thus far, no one has explored the effects of music on the acquisition of subordinate-clause word order in German.

The experiment I am proposing has a classic design, involving a pretest, experiment and post-tests (including follow up post-tests) with two groups: a control and experimental group. The lesson subject I choose to evaluate is grammar, specifically subordinate-clause word order in German. According to Pienemann (2013), this grammatical structure is acquired late in naturalistic learners. Thus, I chose this structure as the strongest test of my hypothesis. Given the nature of this particular syntactic structure, beginning students would not be practical participants.

I would therefore evaluate two groups of college level students in their second semester of German at Texas State University in San Marcos, Texas (an average group size consisting of 25 students). I've chosen this level because at this school, students are first introduced to subordinate-clause word order during their second semester of study.

These students would be pretested for prior knowledge of the subject, by means of a multiple choice, written pre-test. This is to identify anyone who shouldn't be included

in this study. Each group will take a pre-test of 10-20 multiple choice questions including instances of subordinate-clause word order. This will tell us if they have prior knowledge of the information or grammatical structures. The scores will be noted and kept for post-test comparisons.

The students will attend a lesson at different times, but preferably with the same educator. One group would be taught the lesson using standard drills, as is common practice, while the other group would be taught using a song: The song I chose to use in my experiment was *Durch den Regen* (In English "Through the rain") by Staubkind, a modern German pop band. I chose this song because it contains instances of the subordinate-clause word order being evaluated.

The music group will be presented with the song, and the drill or control group will be presented with standard grammar drills. The song will be played about three times, as suggested by Lake (2003) among others, and the drills will be completed in a set of three as well. There will then be a brief explanation of the grammar given after both treatments are completed. The brief explanation would be identical for each class.

Immediately following the lesson, both groups would be given three post-tests including a repeated pre-test, followed by an oral test, which would then be followed by an explicit knowledge test with verb conjugation. Included in the post-test would be an aural section in which students were asked questions using the verbs and inverted word order. They would be asked 3-5 simple questions, to which their answers/response time would be recorded. The third would be a fill in the blank style written evaluation, to demonstrate the students' level of ability to produce the grammatical structure individually and without aural assistance.

These post-tests should be re-administered about two weeks later following the experiment, in order to evaluate both short term and long term effects of the treatment. I would then do a statistical comparison of the results. Sample forms and pre-/post-tests can be found in the appendix.

Possible Outcomes

This experiment is to see whether music affects learning and retention in second language acquisition. In the short run, it could be that the drills appear more effective, if students respond better to the traditional learning style or don't like the song played. It is quite possible that the music group will have better results due to the effects of music on the brain (Murphey 1990) or by encouraging student involvement (Lake 2003) or because it represents a change of pace in the classroom (Fischer 2001). It is possible that there would be no significant difference between the two treatments. This result would suggest that repetition in any manner might be sufficient for improvement. In the long run, one treatment might perhaps lead to better results as well, and this would of course be the most interesting result. The study could show that neither treatment would lead to improvement in students' performance in either the short or the long run. If neither treatment were to cause significant improvement, this might suggest the need for more explanation of or practice with the content, and/or for more advanced students.

Significance of Proposed Study

This experiment would help us see if music can really aid in the acquisition of subordinate-clause word order over other teaching methods such as standard drilling. I chose standard drilling as an example for the non-music treatment, because this has been my most common experience with learning word order in college German courses, so I know it is common practice in more than one college in my state. I chose subordinate-clause word order because it is learned relatively late and varies significantly from English. Also, the effects of music on learning complex grammar structures have not been evaluated.

Note that with German subordinate-clause word order, the clause's conjugated verb is in clause-final position. For example, the German sentence *ich bin froh, dass du hier bist* / "I am happy that you are here" includes a main clause (*ich bin froh*) and a subordinate clause (*dass du hier bist*). While German main clause word order is subject-verb-object (SVO), German subordinate clause word order is subject-object-verb (SOV) or verb-final. Thus, the literal English gloss of the German example sentence's subordinate clause is "…that you here are", where the verb *are* appears in final position. Some examples of this word order in German songs are as follows:

German:

"Und <u>wenn</u> ich jetzt zum Himmel <u>schau</u>',
dann <u>werd</u>' ich wissen, wo du jetzt grad bist.
now.

Immer <u>wenn</u> ich durch den Regen <u>geh</u>',
<u>kann</u> ich fühl'n, <u>dass</u> es dich <u>gibt</u>. „ (Staubkind)

English:

„And when I look up at the sky
Then I will know where you are right

Everytime I go through the rain,
I can feel that you are there."

This includes "*wenn, weil* and *dass* clauses" in both regular and subordinate-clause word order. *Wenn* can be translated as "if" or "when", but always triggers subordinate-clause word order. *Weil* can be translated as "because", but this is only one word for because, and this one triggers subordinate-clause word order. *Dass* can be translated as "that", but only in certain instances and will also always trigger subordinate-clause word order. In the book I am using (Donahue 1990), *wenn* clauses are taught first of all the subordinate-clause word order triggers, making it a good introduction to this sentence structure.

Subordinate-clause word order is taught in the second semester of college German courses at Texas State University in San Marcos, Texas. Here are examples as found in Kapitel/Chapter 7 of our current textbook (Fig. 4-7). It also continues to be taught in Kapitel/Chapter 10.

Fig. 4 (Donahue 1990)

wenn and subordinate word order

The first subordinating conjunction you will learn is **wenn**. **Wenn** can mean *if*, *when*, or *whenever*, depending on context. Study the following German sentences, the subordinate word order that is used in the subordinate clause, and their possible English equivalents:

Dieses Wochenende werde ich Ski fahren gehen, *wenn es* genug Schnee *gibt*.
This weekend I'll go skiing *if* there's enough snow.

Ich werde oft ziemlich müde, *wenn ich* den ganzen Tag Langlauf *mache*.
I often get pretty tired *when[ever]* I go cross country skiing all day long.

Ich gehe gern Windsurfing, *wenn es* warm und etwas windig *wird*.
I like to go wind surfing *when[ever]* it gets warm and a bit windy.

Ich trinke Kaffee, *wenn ich* müde *bin*.
I drink coffee *if/when[ever]* I'm tired.

Mein Bruder schließt das Fenster, *wenn es* kalt *wird*.
My brother closes the windo *if/when[ever]* it gets cold.

Wir lernen fleißig, *wenn wir* ein Examen *haben*.
We study hard *if/when[ever]* we hve an exam.

Fig. 5 (Donahue 1990)

Beginning sentences with *wenn*-clauses

You may choose to begin a sentence with a ***wenn*-clause**. When you do, consider the entire wenn-clause to be a single unit that occupies the first slot in the sentence. That means that the conjugated verb in the main clause is in second position, the subject will slip into the third slot immediately following the verb. Remember that a comma must be used to separate the ***wenn*-clause** from the main clause.

Wenn ich morgen Abend Zeit habe, **spiele** _ich_ Minigolf.
Wenn es kalt genug wird, **können** _wir_ Schlittschuh laufen gehen.
Wenn wir genug Spieler haben, **können** _wir_ Fußball spielen!
Wenn es warm wird, **mache** _ich_ gern Leichtathletik.
Wenn das Fußballspiel schlecht ist, **werde** _ich_ den Fernseher ausmachen.

Fig. 6 (Donahue 1990)

dass

The subordinating conjunction **dass** means *that*. It is often used with **wissen** and frequently follows verbs that introduce an opinion, a suggestion, or a quote: **sagen, meinen, denken, glauben, finden**. Note here the difference between **dass** and **das**.

- The conjunction **dass** introduces a subordinate clause:
  Es ist klar, **dass** Inge immer alles versteht.

- The pronoun **das** is used as a subject or an object:
  Das ist wunderbar!   Ich finde **das** fantastisch!

sagen, dass . . .
    to say that   Volker **sagt, dass** er Football total interessant findet.

denken, dass . . .
    to think that   Rüdiger **denkt, dass** Tennis langweilig ist.

Fig. 7 (Donahue 1990)

Explaining why with *weil*

A ***warum-Frage*** is a challenging question to answer because you need to give a reason in your answer. You usually answer with a sentence that contains a subordinate clause. A key ingredient in answering a ***warum-Frage*** is the subordinating conjunction ***weil*** (because). ***Weil*** is much more commonly used than the coordinating conjunction ***denn***. In fact, you are advised to use ***weil*** almost exclusively.

Warum essen Sie so viel?
--- Ich esse so viel, ***weil** ich sehr hungrig **bin**.

Warum können Sie das nicht machen?
--- Ich kann es nicht machen, ***weil** ich nicht stark genug **bin**.

Warum sollen wir unsere Mäntel mitbringen?
--- Wir sollen unsere Mäntel mitbringen, ***weil** es kalt **wird**.

Warum soll man nicht rauchen?
--- Man soll nicht rauchen, ***weil** es ungesund **ist**.

Warum müssen wir so ruhig sein?
--- Wir müssen so ruhig sein, ***weil** Karl noch **schläft**.

Avenues of Future Research

An obvious line of future inquiry would be to investigate whether songs might lead to better learning of other aspects of language. Also, further studies could investigate different levels of language learners. For instance, would the same pedagogical intervention help students learn aspects of French or Arabic in the same manner? The findings from the initial experiment, when completed, should be tested and re-tested with larger groups of participants. Also, examining findings across different groups of people would help with accuracy of the treatment. For instance, might it work better with adults or with children, or with men versus with women? Further work could also perhaps be done to investigate whether the type of music used or the degree to which students liked music in general could influence the outcome. There is much debate among the presented articles, but there were no empirical studies I found that compared how well a certain language aspect is obtained using classical versus pop music, etc.

One additional study could examine whether it is music itself (regarding rhythm and pitch) or the song (with lyrics) that is more effective in language learning. Whereas the words are presented, could it be the rhythm or pitches alone that help? Could this be the aspect of drills that make them as effective as they are? Is it the combination that makes it a more powerful tool for the student's language exposure? How might rhythm and pitch relate to the culture?

Conclusion

Although evidence has been gathered regarding music's effectiveness on language learning, no studies have been conducted concerning its effects on the acquisition of grammar. My experiment would provide some answers to these important and as-yet unanswered questions. While the studies that I reviewed have tacitly assumed that using music and song is helpful in teaching second languages, there is in fact little objective evidence that the practice actually works, i.e., that using music and/or song leads to reliably and measurably superior second language learning. Currently, educators seem to assume either that the practice works, or that it does not. Consequently, there is a need to know whether using songs to teach foreign languages is genuinely helping students to acquire aspects of their second language. Without such knowledge, language teachers will continue not to know whether using music and/or song is in any objective sense beneficial to second language learning. With such knowledge, language teachers will have a principled reason for either using music and/or song in their teaching more frequently, or for making it a more occasional practice.

References

Abbott, M. (2002). Using music to promote L2 learning among adult learners. *TESOL Journal, 11*(1), 10-17. doi:10.1002/j.1949-3533.2002.tb00061.x

Domoney, L., & Harris, S. (1993). Justified and ancient: Pop music in EFL classrooms. *ELT Journal, 47*(3), 234-241. doi:10.1093/elt/47.3.234

Donahue, F. E., & Watzinger, J. (1990). Kapitel 7. *Deutsch Zusammen: A communicative course in German* () Macmillan Pub Co.

Failoni, J. W. (1993). Music as means to enhance cultural awareness and literacy in the foreign language classroom. *Mid-Atlantic Journal of Foreign Language Pedagogy, 1*(Spr), 97-108.

Fisher, D. (2001). Early language learning with and without music. *Reading Horizons, 42*(1)

Griffin, R. J. (1977). Teaching hispanic culture through folk music. *Hispania, 60*(4), 942-945. doi:10.2307/340674

Howards, A. (2014). Beyond the glockenspiel: Teaching race and gender in mozart's zauberflöte. *Die Unterrichtspraxis/Teaching German, 47*(1), 1-13. doi:10.1111/tger.10151

Jolly, Y. S. (1975). The use of songs in teaching foreign languages. *The Modern Language Journal, 59*(1-2), 11-14. doi:10.1111/j.1540-4781.1975.tb03618.x

Lake, R. (2002-2003). Enhancing aquisition through music. *The Journal of the Imagination in Language Learning and Teaching, VII*, 101-106.

Leith, W. D. (1979). Advanced french conversation through popular music. *The French Review, 52*(4), 537-551. Retrieved from http://www.jstor.org/stable/390328

Lüke, M. (2008). Modern classics: Reflections on rammstein in the german Class1. *Die Unterrichtspraxis/Teaching German, 41*(1), 15-23. doi:10.1111/j.1756-1221.2008.00002.x

Medina, S. L. (1990). The effects of music upon second language vocabulary acquisition. *Annual Meeting of the Teachers of English to Speakers of Other Languages,* San Francisco, CA.

Merriam-webster. (2015). Retrieved Feb, 2016, from http://www.merriam-webster.com/dictionary/din

Murphey, T. (1990). The song stuck in my head phenomenon: A melodic din in the lad? *System, 18*(1), 53-64. doi:http://dx.doi.org/10.1016/0346-251X(90)90028-4

PIENEMANN, M. (1998). Developmental dynamics in L1 and L2 acquisition: Processability theory and generative entrenchment. *Bilingualism: Language and Cognition, 1*(01), 1-20. doi:10.1017/S1366728998000017

Schiffman, H. (2008, Mon Jul 28). The role of music in second language learning: A vietnamese perspective. Message posted to http://listserv.linguistlist.org/pipermail/lgpolicy-list/2008-July/007663.html

Staubkind. (2014). *Durch den Regen*

Sample Pre-Test 1

Multiple Choice

1. ____ ich zu schule____

    A) wenn, kommen

    B) komme, wenn

    C) wenn, komme

    D) kommen, wenn

2. Ich ____ auf der Straße.

    A) laufe

    B) laufen

    C) läufst

    D) läuft

3. ____ du jetzt zum Himmel ____, siehst du Vögel?

    A) schauen, wenn

    B) schaust, wenn

    C) wenn, schaust

    D) wenn, schauen

4. dass es dich ____

    A) wenn

    B) geben

    C) gibst

    D) weil

5. ____ ich ein Auto ____, kann ich zu Schule fahren.

    A) weil, haben

    B) haben, weil

    C) habe, weil

    D) weil, habe

6. _____ du an mich?

    A) denken

    B) danke

    C) denkst

    D) gedacht

7. _____ ich draußen _____, trage ich Schuhe.

    A) gehe, wenn

    B) wenn, gehen

    C) wenn, gehe

    D) gehen, wenn

8. Wissen Sie, _____ er _____?

    A) kommt, weil

    B) weil, kommt

    C) kommt, ob

    D) ob, kommt

9. Ich gehe nach Hause, _____ ich zu viel Hausaufgabe _____.

    A) habe, weil

    B) haben, weil

    C) weil, haben

    D) weil, habe

10. Wissen Sie, _____ die Blumen _____?

    A) weil, blühen

    B) ob, blühen

    C) blühen, weil

    D) blühen, ob

Sample Pre-Test 2

Oral

1) Warum machen Sie Hausaufgabe?

2) Wann gehst du ins Bett?

3) Warum kommen die Leute so spät?

Sample Worksheet 1

Music Group Activity

Durch den Regen by Staubkind

Ich lauf'(e) durch den Regen.
Unter mir verschwimmt der Asphalt.
Und ich weiß, irgendwo da draußen
fall__ die gleichen Tropfen auf deine Haut.

(Ich) Bin schon so lang' auf der Suche,
(Ich bin) schon so lang' auf diesem Weg.
Und ich ____ mich mit jedem Schritt,
ob ___ dir vielleicht damit genauso ____.
und wenn ___ jetzt zum Himmel ____,
____ ____ vielleicht auch an mich?

Immer wenn ____ durch den Regen ____,
____ ____ fühl'(e)n, dass ____ dich ____,
Weil ____ _____, ____ ____ dasselbe seh'(e)n.
in diesem einen kurzen Augenblick.

Immer wenn _____ durch den Regen ____,
kann ____ ____, dass ____ dich ____,
Weil ____ ____, ____ ____ dasselbe seh'(e)n.
in diesem einen kurzen Augenblick.

Und du ____ durch den Regen.
Hinter dir ____ die Stadt.
Und irgendwo da draußen
____ ____ ganz kurz an dich gedacht.
Und wenn ____ jetzt zum Himmel ____,
dann ____ ____ wissen, wo ____ jetzt grad ____.

Immer wenn _____ durch den Regen ____,
kann ____ ____, dass ____ dich ____,
Weil ____ ____, ____ ____ dasselbe seh'(e)n.
in diesem einen kurzen Augenblick.

Immer wenn _____ durch den Regen ____,
kann ____ ____, dass ____ dich ____,
Weil ____ ____, ____ ____ dasselbe seh'(e)n.
in diesem einen kurzen Augenblick.

TABLE 1

ARTICLE USED	SECOND LANGUAGE(S) EXPLORED	ELEMENT(S) OF LANGUAGE(S) DISCUSSED	LEARNERS' AGE/LEVEL	EXPERIMENT CARRIED OUT	SURVEY/ INTERVIEW CARRIED OUT	DETAILS/DESIGN OF EXPERIMENT (IF APPLICABLE)
Article 1 Leith 1979	French	Culture, Phonetics, Pronunciation	High school, university	No	No	
Article 2 Fisher 2001	English	Speaking, Reading	Kindergarten (Primary school)	Yes	No	From Abstract: "Eighty (Kindergarten) students who spoke Spanish at home were randomly assigned one of four teachers. Two of the teachers used a great deal of music in their classrooms while the other two did not. The students and their teachers remained together for two years - kindergarten and first grade. Literacy achievement data suggests that music had a positive effect on oral language and reading scores. Differences focused on the use of music for morning opening, music and signing while working with words, and the use of music during listening stations.
Article 3 Schiffman 2008	English	Culture	EFL Students	No	Yes	From Article: "The study includes interview, observing, participating in social and musical activities. The researcher conducted informal and unstructured interviews with three EFL teachers and six students in various situational contexts as well. Each interview lasted
						approximately an hour. The interviews were conducted in English as they were fluent in English. Electronic equipment was used to record the interviews."
Article 4 Howards 2014	German	Culture, History, Grammar, listening, reading, speaking, writing	Students (Article nature suggests university level)	No	No	
Article 5 Lüke 2008	German	Literature, Grammar,	High School, University	No	No	
Article 6 Abbott 2011	English	word order, vocabulary, and the extent of metaphorical usage	Adult, Suggests for children	No	No	
Article 7 Griffin 1977	Spanish	Culture	Young Students	No	No	
Article 8 Domoney & Harris 1993	English	Vocabulary (opposites), Grammar, slang	Teachers (This program specifically), Students	Workshop (No statistical significance)	Closing discussion (by teachers in program)	
Article 9 Failoni 1993	Foreign Languages	Culture, Phonetics, Reading skills, history, listening, writing, grammar	Students	No	No	

TABLE 1

ARTICLE USED	SECOND LANGUAGE(S) EXPLORED	ELEMENT(S) OF LANGUAGE(S) DISCUSSED	LEARNERS AGE/LEVEL	EXPERIMENT CARRIED OUT	SURVEY/ INTERVIEW CARRIED OUT	DETAILS/DESIGN OF EXPERIMENT (IF APPLICABLE)
Article 10 Jolly 1975	Japanese	Conversation Vocabulary Grammar, pronunciation	University	NO	YES	Students were asked to rate songs in a survey based on usefulness in educational and psychological needs (1-5, 5 being very useful)
Article 11 Medina 1990	English	Vocabulary	48 Second Graders	YES	NO	48 Second grade limited-English speaking English learners were split into 4 groups: Heard story in Sung version, Oral version only, Heard sung version plus pictures and oral version with pictures. Also, follow up test on the vocabulary 1.5 weeks after initial experiment and testing.
Article 12 Lake 2003	English	Pronunciation (also vocabulary, grammar)	Young Students, Students	NO	YES	One student was asked to complete a summary of how the "music approach" helped her.
Article 13 Murphey 1990	Spanish, French, German, Foreign Language, English	Identifying elements, listening	Language Learners	NO	YES	Questionnaire given to 49 subjects: 30 native English speakers, 19 of other languages in Switzerland asking if they experienced the "SSIMH". All reported yes, except two who were beginners in English.