Multimedia Project Documentation

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Introduction

There is a concept in the multimedia field called "media grammar," which is "the underlying rules, structures and patterns by which a medium presents itself and is used and understood by the audience" (Pavlik & McIntosh, 2017, p. 44). Each medium (film, music, photos, literature, etc.) has its own "language." This language is used to communicate ideas and feelings—and it can be used to specifically manipulate the audience's perception and emotions. This is particularly true of film scores, which actually tell the audience how to feel about what they are seeing.

I have been doing my [stories2music project](#) for several years now. I narrate my flash fiction stories over short, orchestral pieces generally used for film and TV scenes. [Flash fiction](#) is a short form of storytelling. The stories range from 75 to 1,000 words. They have one main character, vivid scenes, dense poetry-like prose, middle-starting plots, character-revealing actions and off-page endings. You can learn more about this amazing journey on my [stories2music blog](#).

What is remarkable about this project is that the music pieces (randomly chosen from music licensing sites) match the narrated stories so perfectly that they could have been written specifically for the stories. By matching, I mean that the music uses media grammar. For example, when a kite flutters in the air in the story and the music flutters like the kite, the listener recognizes that connection (media grammar)--it creates a more vivid imaginative experience. Sound effects also further enhance the imaginative imagery. This is similar to the effect that radio stories have on the listener's imaginations. "Radio and recorded music have their own grammar, one based only on sound . . . which can be used to convey information, capture attention, or evoke a mood or scene" (Pavlik & McIntosh, 2017, p. 45). This is exactly what the music is attempting to doing in my stories.

I've started to do research on the power of the story (in general) and the power of film music to enhance narrated stories by creating a richer, imaginative experience similar to the old radio shows. What I've found with my stories2music stories is that the audio narration alone isn't that compelling. However, when the orchestral film music is added—and matches the stories specifically (utilizing the media grammar of film music)—the stories have a richer, deeper effect on the imagination and emotions. This connection intrigues me.

Research

Below are quotations from research articles related to the topic:

- "Radio and recorded music have their own grammar, one based only on sound . . . which can be used to convey information, capture attention, or evoke a mood or scene" (Pavlik & McIntosh, 2017, p. 45).

- "Our findings demonstrate that the inclusion of descriptive sound effects and especially of sound shots in a fictional radio drama increases mental imagery and that a relationship exists between this increase and the degree of listener attention (Rodero, 2012, Abstract).

- "In the media business, we say that the images convey the information and the music tells us how to feel about it" (Ohler, 2013, p. 238).

- "Our goal in using music in digital stories is simply this: Music must support the story and not overwhelm the narrative" (Ohler, 2013, p. 239).

- ". . . the music and story are both very important to the storyteller; therefore, they go together. I question this approach, because this means that the story has been created for the storyteller rather than an audience . . . For the most part, I think stories should be created for audiences. This doesn't mean they shouldn't be personally expressive or even challenging to an audience. But in the end, if you lose your audience, then your story fails" (Ohler, 2013, p. 240).

- "When you add music to your story and let it run under a person talking, what you're really doing is creating a new piece of music . . . Every sound you bring into your story is working together to create not just a story experience, but a musical experience, and the music you're making can either serve or undermine the meaning of your story (Mitchell, 2014, para. 2).

- "Music and literature are intended to be heard . . . literature is an art presented to the ear rather than to the eye because when we read, we mentally hear the sounds" (Brown, 1948, pp. 8–9).

- "Once music is linked with a visual narrative, it takes on elements beyond that of simply musicality—it takes on a character of its own, becoming almost as another player in the story, one with its own perspective, voice, and interrelations with other characters. Given the positive impact of music on film, one might wonder whether similar results would be found when combining specially-composed music with a fiction text" (Strong, 2013, p. 5).

- "In considering the effects of music on fiction text, . . . perhaps the closest one could come to determining its effects would be examining the impact music has had on another storytelling medium—film. Music in film today has a considerable effect on the viewers. It adds to the emotional quality of the film (Meyer, 1956), provides a subtext and omniscient commentary to the visual story (Schaefer, 1998), and bridges cultures and languages in its ability to communicate with all members of an audience (Schaefer, 1998). For these and other reasons, most people would concede that music is a vital and effective part of film (Schaefer, 1998). (Strong, 2013, p. 5).

- "Agawu (1992) also believes that text and music blend well together, but his belief is based upon the theory that they work symbiotically to convey the intent of the author. He claims that words exist on the top of the structural pyramid of an artistic work, providing the reader with access to meaning. Music, on the other hand, forms the base of the pyramid, working to signify the text. If one is found without the other, meaning is possible, but it is most fully and intricately grasped when the two are created to work together to best convey the intent of the author/composer" (Strong, 2013, p. 8).

- "Fiction texts in general are meant to be diverting—allowing readers to escape the world around them. Multimedia also is meant to be diverting. However, in the case of the e-books used in this experiment, where the music and sound effects were designed to match the text, the multimedia and text are diverting the reader together—with purpose. There is a clear reason behind the potentially distracting noise, and thus the multimedia e-books are more enjoyable . . . . The purpose behind the fusion of fiction and multimedia allows for the reader to be swept away into the story's world, in a highly enjoyable way" (Strong, 2013, p. 56).

- "While SFX [sound effects] served only to strengthen the enjoyment of fiction . . . music served to enhance enjoyment . . ." (Strong, 2013, p. 53).

- "The present study is the first to support the notion that publishers may have much to gain from the publication of multimedia-enhanced fiction e-books. Such books may appeal to a wider audience than currently targeted, and they may increase the enjoyment of the reading experience for many individuals" (Strong, 2013, p. 62).

Topic

My topic/research question is: In an audio story, does the inclusion of orchestra film music and sound effects enhance the vividness of the images created in the participants' imaginations and more effectively maintain their attention?

What Do You Plan to Do?

For my project, I created a survey that tested the above research question.

One of my stories2music—Aurora's Secret—has music and added sound effects (thunder clap, rain, thud of dirt on casket, closing carriage door, and carriage moving off), so I used that story for the test.

I had my participants to listen to three versions of the story:

1. The version with only the narration without music or sound effects.
2. The version with narration and music but no the sound effects.
3. The version with narration, music and sound effects.

After listening to each version, the participants answered the survey questions.

Here is the link to the web page with the audio clips:
http://www.stories2music.com/gcmw100/gcmw100_survey.html

What Do You Hope to Find Out?

I want to test the validity of my research question. The hypothesis that I want to prove is true or false is: The inclusion of orchestral film music and sound effects enhance the vividness of the images created in the participants' imaginations and more effectively maintains their attention.

Why Are You Doing This Study?

I am interested in the media grammar concept and how well my stories use the "grammar" of film music and sound effects to enhance the experience of the stories.

Why is it important?

It is important to me because I want to make my stories2music more effective. It is important in general because scholars are studying this topic.   Book publishers (and e-book publishers) are moving into the audio book industry, so there is a growing market for audio books. Many are adding music and sound effects like the old radio shows.

Questions Used in the Survey

There were three sections in the survey. The participants listened to each of the three audio clips and answered that section of the questionnaire after listening to each one.

Questionnaire 1 for audio clip with narration only:

1. Please describe in vivid detail what imagery you saw in your imagination while listening to the audio clip.

2. What range of emotions did you experience while listening to the audio clip?

3. Please describe your overall experience of the story.

Questionnaire 2 for audio clip with narration and music.

1. How did the music affect the vividness of the imagery in your imagination?

2. Please describe any places where the music enhanced specific words or sections of the story.

3. Please describe what effect the music had on your emotions.

4. Please describe how the music changed your experience of the story.

Questionnaire 3 for audio clip with narration, music and sound effects

1. How did the sound effects affect the vividness of the imagery in your imagination?

2. Please describe what effect the sound effects had on your emotions.

3. Please describe how the sound effects changed your experience of the story.

4. Are there any other comments you want to add?

Participants (Demographics)

Who and Where

I sent the survey request via email to four groups of participants, and they responded via email with survey:

1. National University Online Writing Center consultants (22) who are mostly college English teachers, so they are experienced storytellers, story readers and story listeners.

2. Adjunct faculty in the National University Sanford School of Education who specifically teach the educational technology courses (15) because they understand multimedia.

3. Students in our History of Multimedia class (23) because they might be younger, so they would provide a different perspective from the older adults above.

4. Some family and friends on Facebook (20) because they are various ages with various experience with multimedia. Some are musicians, so they understand music. Some are writers.

When

Participants were emailed the request for participation, the survey questionnaire and the text to the story on October 26, 2017, and they were requested to submit the survey by November 1, 2017.

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Conclusion

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Restate Your Topic

This is my research question: In an audio story, does the inclusion of orchestra film music and sound effects enhance the vividness of the images created in the participants' imaginations and more effectively maintain their attention?

Recap What Was Learned in the Surveys

Only three participants submitted surveys: two from the Writing Center and one from our History of Multimedia class. See Appendices for selected quotations and summaries from the surveys.

I learned the following from the surveys:

- The participants could vividly describe the scene from the narration-only version. The music and sound effects versions, in some areas, altered that original vision. For example, one participant said that the dirt clod dropping on the casket was heavier than she originally imagined once she heard the sound effect of it. This may mean that the music and sound effects guide the listener's imagination to some degree.

- All participants felt the music, at times, was distracting (possibly too loud).

- Participants did recognize the music's grammar of the somber beginning and the more uplifting ending of the music and how it matched the story.

- The music and sound effects versions made a stronger emotional impact for the participants.

- The music and sound effects version made the scenes more cinematic for the participants. They preferred the third version with music and sound effects.

- One participant said that the music and narration "eventually blend into each other." She meant this as a negative because it distracted her. However, this is a key observation for me because that is how I made the stories—the music is a necessary part of the storytelling and, if the media grammar is right, they do blend together.

One big take-away from this project is a better understanding of how the imagination is affected. I realize that reading a text is the purest way of allowing the imagination to work unhampered. Everyone's images of the words being read are different for each person.

When a text is being narrated, the narrator can influence somewhat the images created in the imagination. For example, if the narrator reads a sentence with a certain inflection (sarcasm, for example), then that tone influences how the listener views the character speaking in his/her imagination. The listener might imagine the character with a sarcastic face and body language. The narrator is influencing the imagination, to some degree, especially if the listener would not have read the text as sarcastic.

Films tell the imagination what to see. The audience might be thinking while watching the film, but they aren't using their imaginations to create the images in their minds. The film is doing that form them, so film absolutely influences the viewers' visual understanding. Film music adds another layer because it tells the viewer how to feel about the scene. Film allows the imagination the least freedom to work.

When my participants listened to the story without music or sound effects, they described the scenes very specifically on the questionnaires. It was clear that the words did generate similar images in all three participants' imaginations. The words did create emotions in some cases.

However, when the music was added, it changed their original imagery. They described the same scenes differently. The emotion was deeper; one participant nearly cried. The music told the participants what to feel. The music changed their imagination.

Then the sound effects also changed the original imaginative images. One participant said the mud falling on the casket sounded heavier than she had originally imagined, and she reasoned that the rain made the dirt muddy and heavier, something she did not imagine originally. One participant had a stronger sense that the grieving woman was leaving in the carriage with that sound effect. That same participant said that he somehow missed the idea of "fierce rain" in the first version, but the sound effects of the rain brought that to his attention, so his view of the scene changed.

Although I did give them the text in case they wanted to read it, I should have added that first to the study to see how it affected the imagination and then added the other three tests to see how their imagery changed.

Summarize Relevance and/or Implications

There is not enough scholarly research yet on the connection between music, sound effects and fiction stories. More research needs to be done, especially because the e-book industry is moving toward audio stories such as Amazon's Audible as well as Whispersinc for Voice, where the reader of the e-book can also hear the narration while reading.

The music grammar is essential to the storytelling in the stories2music stories--perhaps not so much with "Aurora's Secret" but definitely with some of the other stories. I realize that I understand the nuances of the music grammar better than the listeners. Whereas I am astounded by how intricately the music grammar matches the stories, I don't think listeners "get" as much of it as I do. I do feel that the stories do what Strong (2013) suggested:

> Once music is linked with a visual narrative, it takes on elements beyond that of simply musicality—it takes on a character of its own, becoming almost as another player in the story, one with its own perspective, voice, and interrelations with other characters. Given the positive impact of music on film, one might wonder whether similar results would be found when combining specially-composed music with a fiction text (p. 5).

The first 11 stories were previously-written stories, and music was chosen for them. However, now I am writing the stories to the music. I listen to the music, see the story in my imagination and write it to match the music. Therefore, there is an essential symbiotic relationship. The music drives the story.

> Agawu (1992) believes that text and music blend well together, but his belief is based upon the theory that they work symbiotically to convey the intent of the author. He claims that words exist on the top of the structural pyramid of an artistic work, providing the reader with access to meaning. Music, on the other hand, forms the base of the pyramid, working to signify the text. If one is found without the other, meaning is possible, but it is most fully and intricately grasped when the two are created to work together to best convey the intent of the author/composer (Strong, 2013, p. 8).

However, Ohler (2013), who has written a book on digital storytelling in the classroom, has this to say:

> . . . the music and story are both very important to the storyteller; therefore, they go together. I question this approach, because this means that the story has been created for the storyteller rather than an audience . . . For the most part, I think stories should be created for audiences. This doesn't mean they shouldn't be personally expressive or even challenging to an audience. But in the end, if you lose your audience, then your story fails (p. 240).

He makes valid points. I am mostly focused on my own artistic expression through the stories. What I understand and get from listening to the stories is VERY different from what the audience seems to get from them when I have family and friends listen to them. Whereas the music is dependent and symbiotic to me, it can apparently be distracting to the listener, which could result in losing my audience.

Prospects of Future Research

I think research on audio stories/book is just starting to take off because the audio book industry is realizing the power of the old radio programs with music, radio actors and Foley sound effects.

There is a movement in the audio book industry to do "full cast" productions of audio books with music and Foley sound effects similar to the old radio shows: https://www.publishersweekly.com/pw/by-topic/industry-news/audio-books/article/69642-audiobook-publishers-go-big-on-full-cast-productions.html

The Prairie Home Companion radio show, with new host Chris Thile, has the Royal Academy of Radio Actors as part of the show. Fred Newman does all of the (absolutely amazing) Foley sound effects for the stories told on the show.

BookTrack is bringing AI to the audio book industry. They have music with their audio books that syncs with the reader. However, the music is generic background, not film music. https://www.booktrack.com/

There does seem to be more research about the effects of film music on the film story, but I found only one Master's student who did a study of film music with the audio story: "An Empirical Study on the Effects of Music and Sound Effects in Fiction e-books" by Alissa Strong. https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4911&context=etd

Amazon Audible's Whispersync technology allows readers to switch back and forth between reading the Kindle text and listening to the Audible narration: https://www.amazon.com/Whispersync-for-Voice-Learn-More-Kindle-Store/b?ie=UTF8&node=12527156011

What I Would Do Differently Next Time

Matt Busse, who also did this as his Master's thesis, created an interesting YouTube video, "The Power of Music and Sound Effects in Audiobooks" where he demonstrated a portion of his audio book with background music and sound effects and also with just the narration.   He has a link to a survey on this page, too. https://www.youtube.com/watch?v=8M5NEm46dxk

This might have been a better way for me to go with my survey and listening clips than what I did on my website: http://www.stories2music.com/gcmw100/gcmw100_survey.html

If I did this again, I might have the participants read the story text first to determine the effect on the imagination. Then they would listen to the narration, then the narration and music and then the narration, music and sound effects and report after each listening.

After that, I might add an educational clip about what media grammar is and go through the story and identify which parts of the music are using music grammar that match the story words. For example, when the kite flutters in the sky in the story, the music also flutters like a kite.   I might then have them listen to the full narration, music and sound effect again to see if the education made them more aware of the music grammar and if it changed their experience.

I might also do a story specifically-designed for the study. Aurora's Secret was the only audio story I had with sound effects, but the film music doesn't have much music grammar. I have other stories with an amazing amount of music grammar connection to the words, but they don't have sound effects.

I'm not sure how I would do this, but there should probably be some sort of control group as well as more participants in various age groups and experience with audio books.

Film images show the imagination what to see, and film music tells the viewer what to feel.

Audio stories allow the imagination freedom to create its own images. Music and sound effects should enhance that imaginative experience.

It might be interesting to test the same film music with a film clip and an audio clip to see which created a more imaginative experience.

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Appendix A

Participant 1 (Writing Center, male)

These are key points extracted from the survey.

Note: I have not cited the quotations from the surveys as personal communications (used for interviews) because the participants' names need to be kept anonymous.

Narration Only

- Participant was able to describe the cemetery scene vividly from the narration-only version. However, he did not describe the two characters.

- He felt "curiosity, foreboding, and suspicion."

- The story piqued his interest, but he did not understand the flash fiction format, so he wanted a resolution to the story.

Narration and Music

- He felt that the music "reduced the vividness of the imagery," and he found himself "distributing some of [his] attention to the movements of the melody rather than the words."

- In some areas, "the music added overtones to the emotion of the moment, enhancing the poignancy of the experience."

- ". . . the dropping of the dirt, the receipt of the key, and the end of the story . . . generated particular images which, when complemented by the music, became somewhat more cinematic in my mind."

- "The music changed the emotional tone of the story. It became far less foreboding and mysterious. Instead, the music led the story to feel tragic near the beginning while becoming somehow comforting and hopeful toward the end."

Narration, Music and Sound Effects
(thunder and rain, thud of dirt on casket, carriage door closing, carriage moving off)

- "The vividness of the imagery that I did have was unaffected. However, there were events in the story which my mind had seemingly skipped over which were now brought to my attention. The 'fierce' rain was not something that I had imagined, despite it being part of the story from the very first. The carriage lurching forward was something that I had completely ignored, yet the sound effect brought it back to my mind such that I had a greater sense of that character departing the story (at least for now)."

- "I felt like the story was even more cinematic than the other two versions, and I felt a certain chill when the carriage departed because I could see it in my mind so clearly. In that moment, there was a bit of sorrow, as though whatever life had been lived by the person in the grave was finally, truly over now that the last two people were departing the cemetery."

- I would say that the sound effects helped to make the story more complete in my mind. I tend to get focused on particular events and spend a few seconds mulling them over. Thus, I can end up missing events here and there unless my attention is rooted firmly in place. The sound effects helped to keep me focused on each moment."

Appendix B

Participant 2 (multimedia class student - female)

These are key points extracted from the survey.

Note: I have not cited the quotations from the surveys as personal communications (used for interviews) because the participants' names need to be kept anonymous.

Narration Only

- Participant did not describe much: "I see a storm, the dreary vision of mourners all dressed in black and the sadness and grimness of death."

- She felt "sadness, hopelessness and physical discomfort."

- "The introduction does a good job of describing a sense of place and the protagonist's frame of mind."

Narration and Music

- She felt that the music ". . . made the images more vivid."

- "The beginning was most powerful."

- ". . . the music was great at the beginning and offered a sense of place. However, as the reading progresses, its effect [*sic*] get [*sic*] weaker and at times, seems to take over from the story."

- "It was great to introduce the story but it overpowers the narration and they eventually blend into each other. My attention gets diverted."

Narration, Music and Sound Effects
(thunder and rain, thud of dirt on casket, carriage door closing, carriage moving off)

- "The clapping thunder at the beginning was perfect."

- Participant said that the sound effects had no effect on her emotions and did not change her experience of the story. She said that the sound effects were perfect, but the music was too distracting.

Appendix C

Participant 3 (Writing Center - female)

These are key points extracted from the survey.

Note: I have not cited the quotations from the surveys as personal communications (used for interviews) because the participants' names need to be kept anonymous.

Narration Only

- Participant described the scene in vivid detail (326 words). She envisioned a man as the helper to the mourner. That character is a woman, but this is not stated in the story.

- Her emotions were strongly affected. She felt sad, empathetic, and moved to tears.

- "Overall, she said it took a line or two for her to get connected to the story and get her bearings. She said the story was intense, personal, vulnerable, and intensely raw.

Narration and Music

- "There was an amplified sense of intensity in the music that heightened moments of the story."

- The music sometimes "seemed as though it overpowered some of the images I had envisioned from the narration only, clouding my mind with noises that did not necessarily lend itself to my own imagination coming up . . . "

- "In the beginning, the music led with a greater intensity . . . It was very dark at first as it came in strong and reminded me of a movie scene that is shot on the hillside of England/Scotland/Ireland . . . the tone shift to a more uplifting, promising one" at the end.

- "I was less attached to the story; I did not necessarily get as deep or moved by the words since they were not presented alone. When the man approaches and sees the woman by the gravesite, there seems to be a deeper sense of comradery as it sounded as though there were some upbeats or less dark notes present in the music."

- "Where it changed my experience of the story might have to do with the volume at which the music was over the story itself. In order to hear the story, I had it pretty loud, but the music was just a tad overbearing for me."

Narration, Music and Sound Effects
(thunder and rain, thud of dirt on casket, carriage door closing, carriage moving off).

- "The consistent sound of rain and intermittent thunder enhanced the situation for me. It became more amplified and ever-present so that it makes the listener think about just how drenched the woman by the graveside would be. There was a heightened sense of cold, silence of the woman, and my imagination of her being soaked to the bone after exposure to the elements for the prolonged period of time. It helped with envisioning and vivid imagery."

- "I think the sound effects increased my sensitivity to the people who scattered in the beginning, of the story, that they escaped the graveside due to the rain, not just because they could not stand a storm to stay with the woman. It also slowed down the story for me in general. I had a hard time with the pacing just with the music, but having the consistency of the rain made it more palatable as a listener. The lightening up of the rain at the end of the story, even if it was just meant to be a fade away sound to the end of the recording, coupled with the music becoming more upbeat and promising made me find more of a peace in the ending. Not that it was ever a negative boding situation, but it did help me become more positive or upbeat about the next part to come."

- "I became more attached in some places such as her desolation associated with her standing there in the cemetery and the man's trek to help the woman and become her support. When he helped her toss the dirt onto the coffin, the thud sound that they superimposed made it different than I imagined, it was heavier than I thought because I didn't envision it so dense before. But then with the thought of the rain and the fact that it probably changed the consistency of the dirt, made more sense."

- "I think the sounds added version was my favorite, because it gave more to hang onto for the story. However, the progression of listening to it three or four times by that time might have influenced this preference. The volume of the music might have deterred me a little from that choice, but I also liked the original, narration only version."