The "Science" of Story Structure

A little girl in a red cape meets a ferocious wolf. Three ghosts appear to a miserly man on Christmas Eve. Star crossed lovers face tragic deaths. A girl and her dog venture to see a wizard after a tornado transports them to a fantastical land. These images are likely familiar to you, and they all have one thing in common: They are from stories. As humans, we are drawn to stories. They are catalysts of connections to one another. They help us learn and understand cultural and social contexts. The stories that we tell, see, and read have profound effects on our ideas and emotions. The New Yorker even states: "Stories, more even than stars or spectacle, are still the currency of life, or commercial entertainment, and look likely to last longer than the euro."

My name is Diana Witt, and I am an Honors sophomore at James Madison University. As a Theatre major, I have been a lifelong storyteller. I decided to pursue an Independent Scholars major to study "Storytelling: Writing for the Stage, Screen, and Page." I am focused on learning how narratives and stories are formed for different mediums and the social and cultural impact that these stories can have on our society. In my flash talk, I will be discussing how stories are structured and classified in different genres, what effects stories have on culture and society, and why humans are drawn to them.

When constructing or dissecting a story, it is beneficial to look to professionals or great story artists from different genres. There is not one set of rules or guidelines. While professionals have mapped out the "science" of different story structures, storytelling is an art. Therefore, it cannot be ruled by a strict set of principles that apply to every genre.

One of the first and most well known writers to pose a series of story trajectories was Kurt Vonnegut. His career spanned over fifty years, and he wrote novels, short stories, non-fiction, and plays. He posited that stories always fell into one of eight main categories: Man in Hole, Boy Meets Girl, From Bad to Worse, Which Way is Up, Creation Story, Old Testament, New Testament, and Cinderella. Just from the names alone, I'm sure certain stories come to mind. He graphed the trajectories of these stories to show where the conflict of each story.

Similarly, screenwriter Blake Snyder posed nine categories in his book, *Save the Cat!*. He maintained that every film fits into one of these categories, and screenwriters should determine which one their screenplay is in. Snyder asserts that writers should: "Give me the same thing, but different." Writers for commercial media have to consider profit: what will sell, what audiences will be willing to risk money on.

Pixar story artists work to compose story beats, to create a story spine. In his TedTalk, "The clues to a great story," story artist Andrew Stanton explains how he had to break the mold at Pixar when creating the story for *Finding Nemo*. *Finding Nemo* did not have the typical trademarks of a Pixar film: it did not have songs or a romantic love story. Executives even advised against what the writers had come up with, calling in other professionals. But Stanton posed a key principle to storytelling: the necessity of making the audience care. Relating Nemo's struggles to his as a premature child, Stanton showed the importance of relaying personal emotions through story.

Stories have the power and influence to educate, entertain, and inspire. Texts throughout history have challenged social institutions, innovated styles, and introduced new thoughts and ideas. Storytelling shapes the mental schemas of people, and by telling a single story, can spread false perceptions of people native to other countries. Conversely, stories can cause readers and audiences to question or abandon societal expectations. For example, the play Cloud Nine

shaped thinking on sexuality and women's role in society, as the story posed characters who were less reserved and conservative than people at the time. Caryl Churchill's work was important to feminism and often inverted social and societal expectations. We receive a lot of our cultural understanding through the stories that the media portrays to us, and often these stories can be an oversimplification. Nigerian novelist Chimamanda Adichie recalls her American college roommate asking to listen to her "tribal music," and assuming that Adichie came from poverty. Her roommate was simply misinformed by the books and perpetuations of generalizations of Africans.

Stories in religious texts shape and define religious principles. Some themes of biblical stories even appear in other forms of Western literature. Narrative structures are utilized throughout education. There is even a type of therapy called narrative therapy, in which people identify the values that are important in their lives through crafting a narrative story. This form of psychotherapy allows participants to shape the problems in their lives by taking control as the "narrator." Stories across different structures can cause audiences to have visceral reactions.

In our current climate, the presentations of stories are changing. People, especially young people, are reading less. With our attention being pulled in so many different directions by distractions of media and technology, it can be interesting to wonder how stories fit into this landscape. As storytelling shifts, the new presentations of it can change the impact stories have on our world. Newer media outlets like Buzzfeed have changed not only the media landscape but have altered the way stories are told and presented to audiences. Presenting text through interactive websites and visual material has allowed the company to gain steam over the past few years. Jennifer Egan acquired an audience by posting a short story on Twitter, releasing only one

tweet at a time. She kept her audience on the edge of their seats and accessed an audience she may not have gotten if she published her work elsewhere. In some ways, stories are more accessible now than ever before.

While storytelling is an art, humans are scientifically drawn to stories. Anthropologists postulate that we are wired for stories. We begin recognizing and engaging in storytelling patterns when we are babies. I remember storytelling being an essential component of my childhood. My imagination ran wild as I made silly skits with stuffed animals and complex melodramas with barbies. As soon as I was in school, I began writing stories: fictional tales, personal essays, and eventually feature pieces for my upper elementary and middle school newspaper.

Storytelling is crucial to the human experience and is found across all cultures. Not only are are we able to tell and recognize stories, but according to author Johnathan Gottschall, the human species is drawn to them. Even in our sleep, we create stories. Studies have shown that character-driven narratives can actually increase the levels of oxytocin in the bloodstream.

Oxytocin is a hormone that promotes positive social behavior like empathy and cooperation.

The scientific benefits of stories show that narrative structures are effective for influencing behavior and have a greater impact on memory. Therefore, storytelling is not only for entertainment. It is a powerful tool for advertisers, businesses, and social workers. Experts who give TedTalks or PowerPoint presentations often employ narrative techniques to better connect with their audience. This is found to be a more effective way of presenting information. It allows presenters to make the audience care and gain human empathy. Harvard Business

Review states that to capture the hearts of an audience you must act "by first attracting their brains."

Today, we discussed the how, what, and why of stories. We learned about how great storytellers compose a narrative. We remembered what effects stories can have on audiences in mediums like entertainment and education. We uncovered the scientific reasons why humans love stories. Above all, we discovered that stories are ever present in the world. A sad movie can bring someone to tears. An emotionally-charged play about social issues can motivate change. A humorous book can incite laughter. The representation of excluded groups in literature and the media can spread awareness and understanding. In a world with a wide range of cultures and religions, storytelling is one thing that all humans have in common.

Storytelling is an art, with roots in science. The findings I have presented today are mostly anecdotes from highly regarded story artists. It is difficult to say how far stories will come. Innovation and creativity will keep stories engaging to the contemporary audience. The story structures will evolve with the rapidly changing media landscape. However, stories will always be at the crux of how we communicate and relate with each other. The next time you hear of a boy and a beanstalk, or a fish far from home, I encourage you to remember the importance of stories.

Thank you for your time.

Questions:

• You mentioned that stories are more accessible in the contemporary era than ever before. What implications does that pose?

The accessibility of stories leads to a wider reception. This can be beneficial to those who may have less access to quality education or entertainment. However, it can also be detrimental. The

dissemination of information can happen rapidly, and stories could easily spread misinformation and false perceptions that could harm communities. It is also important that we protect the integrity and rights of authors and story artists when work is shared online.

• If there are so many story structures, which one is best to follow?

Storytelling does not abide by a single set of rules. Because it is an art, new stories are constantly changing the framework. It is beneficial to look to structures from a chosen genre as inspiration, but it is not a binding trajectory.

• Do you think considering profit is wrong when creating a story in the commercial sector?

I think it is important to consider profit, but it should not be the sole consideration. Large corporations like Pixar need to make money on their stories so that they can continue to make more. From a business perspective, it would be negligent of them to not be thinking about profit. However, major media conglomerates have great control over what appears in mainstream media. Therefore, it is crucial that they consider what messages they are sending.