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Multimedia of the Mind: Digital Rhetoric and Interdisciplinary Acquisition

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Honors Senior Thesis
Spring 2021

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Abstract

Multimodal digital narratives are currently in the spotlight for acquisition into the digital humanities. The narrative form is emerging with great research interest, the form having no previously established traditions. This research paper attempts to define the nature of multimodal digital narratives and their implementation into modern society. Specifically, the paper addresses the digital rhetoric appropriated by multimodal digital narratives and how it translates into modifying perceptions of society. This multimodal digital rhetoric is then explored in the context of digital activism and education, formative social discourses the augment societal perceptions. Digital rhetoric is utilized to augement a user's reality to distort and influence societal perceptions.

Audio, visuals, user interface, reading, and text all filter into digital rhetoric, compounding an author's ideas with each added element. All aspects of a digital narrative are tended to create user immersion, creating a multi-sensory narrative. The quality of user immersion and variability in narrative navigation, provides a personalized meaning individual to every user. Digital rhetoric is a means in which the author shapes the limits of what a user retains from the narrative itself.

Examining instances of multimodal digital narratives reveals the quality of societal distortion. By using my research to create the multimodal digital narrative, "Promise of Paradise," I explored digital activism though the platform, Twine. Authors model reality through a predetermined system that allows for authorial intent. The system and elements, designed by the author, indicate motivation and display the specific intent an author has in the creation of their multimodal digital narrative. These concepts speak of immense power and capability, filtering into digital activism and modern education.

Introduction to Digital Narratives

A leatherback spine filled with paper; books have functioned as crucial media in conveying society-altering ideas. Flipping through page after page of words acquiesced by generations, information pertaining to identity and culture has been captured throughout the history of literature. Pages reflect the thoughts, concerns, and atmosphere of time periods, and the book has reigned supreme for centuries. That's changing. The novelty once afforded by commoditizing books and the power of the printing press has long since waned. The turn of the 21st century has all but proven that to be clear, the digital world dominates communication between groups of people. Digital dominance has shifted classical ideas on what defines a narrative, multimodal digital narratives forcing their way into the world of literature. Many authors have shifted to pioneering the digital world, creating digital narratives accessible to audiences potentially around the globe. I would like to emphasize the importance of the word "potentially" in the previous sentence. Even if Internet usage increases, cultural barriers such as: differences in dialect, specific traditions, spirtualities and religions, and different social norms will impede the dissemination of multimodal digital narratives. New technological advances would be required to create an all-encompassing, global community. While reading this essay, you will encounter instances of the word "global" used in relationship to community. Theories explored and addressed are in terms of the hypothetical, exploring the potential of multimodal digital narratives in an optimized and unrestricted setting. The monopolizing domination of the printing industry no longer has the power to supress newfound digital freedom among authors and audiences. Even in digital literature's relatively infantile maturity, multimodal digital narratives grow in numbers, new identities and cultures being added to a newly-imagined global community. Creating a global community is a gigantic task, one that many nations have tried to

achieve through colonialism and Imperialism, but all have failed to do. That does not mean that globalization has been accomplished; multimodal digital narratives narratives must navigate language barriers, Internet accessibility issues, and overwhelming cultural differences. Where digital narratives have to traverse new territory previously unexplored in global literature, the application of new modalities allows for the initial bridging of vast cultural divides. Utilizing these technologies offers different paths to persuade, inform, or direct an audience to adopt specific ideas, especially in relation to social norms. Throughout the duration of my research, I composed the multimodal digital narrative, "Promise of Paradise" to apply my finding to digital activism, fighting silence in the face of corrupt authority. Multiple streams of stimuli offer various communication pathways, but to survive the potential data overload and thus Internet obscurity, especially when contrasted with the standard book, certain factors must be present for multi-modal digital narratives to survive. How information is conveyed is vital for the form's appropriation into standard societal use, multimodal digital narratives offering the presentation of sound, interactability, and complex visuals in the form of images and video. These additions to the author's toolkit add liberty in information's portrayal, combining different sensory experiences to impart nuance and context to an audience. As I composed my own narrative, I learned the author's toolkit is continuously evolving, increasing experience with the medium allows for increased complexity in the development of sensory elements. Multimodal digital narratives are characterized by their seemingly endless possibilities, offering a poignant tool to control, persuade, and inform societal change in the form of education and activism.

Digital Development

To understand the nature of multimodal digital narratives, it is imperative to understand the nature of the digital world. The digital world starts with the invention of the computer and its functions: "If the first computers were designed for number crunching and data processing for military, scientific, and then business applications, they soon became adapted to text editing or the manipulation of alphanumeric strings" (Rockwell 112). The first computers were bigger and had less capabilities than those in 2021. The Internet, has developed rapidly over time, more and more information becoming available through different technological advances. Increased functional capabilities in computer development have allowed for independence in virtual creators: "In 1986, the capabilities of the Macintosh were extended... Mac Plus, Aldus PageMaker and the PostScript capable Apple LaserWriter. The combination... made 'desktop publishing' accessible..." (Rockwell 113). The increased capabilities of computers allowed for a power shift in the world of literature, print pressing no longer monopolizing and dictating human literature. Censorship and creative control were allotted to businesses that allowed for the circulation of written material, but the Internet offered a solution with no intermediary: "The transmission of ideas was slower and more controlled by gatekeepers who deemed certain works appropriate and others inappropriate" (Waite 38). The monopoly printing presses had over the distribution of literature highlighted the impact capitalism has upon literature. Books became vehicles of money production, voices became silenced in the face of financial profitability. The autonomy of communication offered by the Internet has opened up accessibility to users who otherwise would remain silent: "... the digital realm has been characterized as both a space that frees one from control because it need not follow the metaphors and constraints of the physical world and exerts control through... protocol" (Eyman 79). The digital realm offers the potential for social commentary free of production censorship, distorting reality into a controlled, digital

framework. The digital world is framed as one characterized by freedom, independence from intermediaries allowing for a better representation of human perspectives on reality. The global nature of the Internet reinforces freedom through connection to otherwise seemingly unreachable cultural communities. Multimodal digital narratives have the potential to be removed from nation-state bias, allowing for candid commentary on the nature of human society. The autonomy provided by digital narratives allows for communication between disjointed cultural worlds, allowing for multi-cultural discourse on issues that transcend nation-state politics and control. As the Internet flourishes and gains increasing usership, the voices of people across the world can be heard on a potentially global scale.

Multimodal digital narratives allow for the increased proliferation of ideas, providing a powerful tool of social change. With the advent of self-publishing through the desktop computer, people were able to create different types of narratives over the Internet. There is more potential narrative in multimodal digital narratives, allowing for more personalized interpretations and creations of narratives: "In the face of the overwhelming quantities of data that database-management systems now put at our fingertips, no one narrative is likely to establish dominance... interpretive possibilities proliferate as databases increase" (Hayles 182). Increased interpretation variability alludes to the personalized understanding each individual has of an individual work. This personalization is an intimate act, speaking to the power of the message interpreted by each user. With the relative infancy of multimodal digital narratives, these opinions are unimaginably vital for a global understanding of digital narratives. The power and potential derived from the form comes from its extended, delocalized reach. With multimodal digital narratives having the potential of distorting reality and thus promoting societal change, defining and investing in multimodal digital narratives has never proven more vital. Multimodal

digital narratives are a tool in which countless disciplines can benefit, their near-universality and personalized learning component proving vital in communication between various countries on different coninents: "We must be proactive and influence the shape of information technology as early as possible, tirelessly exploring common ground with larger disciplines and taking responsibility for pointing out where our challenges do..." (Crane 50). Digital narratives are positioned to have nearly a global impact, and with their newness defining their capabilities is of the utmost importance. The plot of a story is equally as important as an audience's perception of a story. In a sense, the author has as much control as the audience thinks they have. With classical applauded forms of entertainment, art, and literature steeped so far into antiquity, the importance of different literary traditions has faded into obscurity. The digital world provides a vehicle of accessibility for guided education to evoke social discourse. The Internet transforms the outdated and obscure into a modern, cutting-edge space. Digital narratives provide a geographically-removed space to discuss different ideas, directly allowing authors to shape different societies. There is currently time-dependent importance placed upon digital narratives. Multimodal digital narratives are something of a hidden gem, an opportunity to communicate beyond nation-state borders and create change. Reality does, however, have commentary on digital narratives themselves. The increased attention digital narratives have received in recent years speaks to different disciplines' attempts at defining their relevance in modern society. Digital narratives are unmarked territory, no gentrification or standards have been truly solidified, allowing an arena for anyone to enter. The power of multimodal digital narratives over social change from their interpretable variability, allowing for personalization and retention of a message especially in a digitally-demanding age.

The breadth of the Internet poses a time-sensitive problem for communities racing into the digital age, a data overload so innavigable that communities are pushed to the margins. With the increasing number of Internet users, the amount of information on the Internet will increase: "Never before in the history of the human species has so much information been so easily available to so many" (Hayles 182). This prospect requires rapid acclimation to the digital world, allowing for the transference of new ideas in a time-sensitive manner. The nature of the computer though has a way of impacting the ways ideas are spread: "Whereas database reflects the computer's ontology and operates with optimum efficiency in set-theoretic operations based on formal logic, narrative is an ancient linguistic technology almost as old as the human species" (Hayles 179). The two technologies are set firmly apart, yet by merging the two they take on different forms, requiring modification of the traditional idea of what makes a narrative. The modern nature of the Internet requires narratives to represent societies now, potentially obscuring work seemingly rooted solely in the past: "Even in the best of futures, where classicists customize general tools and share a rich infrastructure with larger disciplines, classicists will have to struggle mightily for their voices to be heard so that emerging systems and standards meet their needs" (Crane 47). Society focuses on ideas of the new, the modern, the cutting-edge. Information consumption will continuously become more selective, more relevant and appealing narratives will dominate classical traditions. Increased interest in the modern will force disciplines to adapt or die out, history being obscured by every dwindling discipline. This uphill battle faced by historically prominent traditions is one of necessity: "Research sustains that the capacity to imagine and plan one's personal future... based on the memory of the past circumstances and contingencies, which produce enormous selective advantages..." (Soto). History provides a foundational backbone of identity, helping to dictate the course of the future.

However, history is a means of looking at a potential solution, not identifying the current problem. In an age of immediacy and reaction-based thinking due to immediate information access, digital activism will, on average, have a much larger reach than isolations of the past. Digital narratives offer possibilities for classical traditions, something that can distort the actions and ideas from the past. Digital Activism, a modern concept, is relatively located in the present, just as humans primarily respond to reality. Multimodal digital narratives allow authors to pull from the current moment and share it across the globe. The possibilities afforded to authors by multimodal digital narratives capitalize on the modern, creating social commentary that inspires change.

Digital narratives have a quality of freedom that is not restricted by paper, a voice beyond the written word, imagination, and skill are the limits of possibility rather than tradition. The interface an author presents is the framework in which an audience can distort the digital world, creating a guided experience of self-realization. A multimodal digital narrative blends any number of elements from, music, sounds, videos, images, text, and code to create a story for the Interconnected Network. Coding is used to construct the spaces an audience enters, distorting the perception of reality through perceived user autonomy, even if the world is guided by an author's directives: "Digital texts by contrast, are operated by a program that reacts to the actions of the user by executing certain modules of code, thereby altering the global state of the computer, just as the behavior of the computer alters the global state of the mind of the user" (Page 35). User interaction with the system creates a dialogue that lets the user change the system within the system's limitation. Instead of the traditional analysis of fixed, physical literature, there is an active dialogue between the narrative and user: "The narratives of digitization in the library shifts learning shifts learning from 'instruction' to 'empowerment', entailing an institutional move

from custodialism to interfacing, and a promotion of citizen engaged in indefinite learning" (Hand 10). Continuous learning based on ideas of empowerment reinforces the transformative experience a multimodal digital narrative provides. The user is intertwined with the system, the two in a seemingly mutually beneficial relationship. Users are afforded perceived autonomy and education, while systems are allowed to spread their messages to users. Authors act as moderators, guiding users based on their interests and fundamental beliefs, rather than leading them down one fixed path. The dialogue created by the design of the system and the user allows for a personalized, relevant interpretation where the autonomy presented in the digital world may trickle out into the real world.

The autonomy provided to the user, the autonomy that makes the retention of the work so powerful, is found in interactions with the system's interface. By interacting with the text, the narrative environment is characterized by its aspect of immersion. Investment in the narrative is created through choice, creating a sense of agency and identity for the user interacting with the system. Research supports the notion of interactivity providing the foundations for immersion and idea retention. Physical touch through physical mediums, that translate real-world action through sensors to the digital world, create an immersive action-reaction based digital reality. An example is SenToys, a toy, humanoid-shaped, grey doll with blue pants, that responds to the physical stimuli a child imparts upon the toy through touch: "The results obtained were indeed very positive, not only because it confirmed once more that children really liked the tangible interface, but also because it allowed us to gather emotional data..." (Paiva 228). Tangibility provides a layer of stimulus not provided within stories found on pages. Action in the physical world has ramifications in the digital one, creating a bridge between the two worlds. Actions taken in reality can affect the digital world, changing the context in which a user responds to

information. The digital world is framed as modeling reality, positioning the digital world into the context of a potential future. Certain actions have certain consequences or rewards. However, the limits of multimodal digital narratives are inherently tied to the source of their power, modeling reality. Paiva, in her study, elucidates this problem, the digital world remains distinct from the original because it is derived from the original: "But, despite this dual presence of users, there is still an absence of seamless couplings between these two parallel existencies leaving a great divide between the two worlds" (226). Physical touch, a sense normally absent for multimodal digital narratives, cannot fully bridge the divide between the digital and real world. Multimodal digital narratives' control over a user is limited; user resistance, whether active or passive, to immersion is present before the narrative starts. The content of multimodal digital narratives has to adapt to their limitations, forcing digital reality to encompass a possibility rather than actual reality. Digital rhetoric proves vital in accounting for preconceived opposition to immersion. Presentation of different stimuli allows for an immersive experience, and so understanding the power behind multimodal digital narratives comes from digital rhetoric.

A New Digital Rhetoric

Multimodal digital narratives rely heavily on digital rhetoric to create an immersive experience in narrative portrayal. Only applying rhetoric to text is no longer a viable solution in analyzing a story. Contextualization of each stream of stimuli has to be explored to understand an author's message in each component's meanings. An audience's response to a set of information is based on the presentation of the message: "Empirical studies in decision theory and political messaging provide additional evidence that even subtle changes in the rhetorical

frame of an information presentation can significantly influence responses" (Hullman). Presentation of information is equally as important as the information itself, defining qualities of the information not explicitly written. The details provided in a multimodal digital narrative are all intentional, every component put together for a purpose. Adaptation and modification are frameworks for analyzing digital craft: "As such, the authorship category of digital craft criticism begins the project of (re) imagining the ethos imaginative writers occupy when appropriating, employing, or modifying language, ready-made texts, and/or particular genres" (Koehler 392). Digital rhetoric depends on observations based on the distortion of reality, presentation can twist or fully change a work's meaning. Digital multimodal narratives depend on shifting perceptions of reality, requiring close analysis to unravel a digital world. Uncovering an author's motive becomes even more vital, each component of the narrative serving to nuance an author's message. The multiple modalities provided by digital narratives use sensory information that humans depend on to interpret reality: "Maribeth Back frames multimodal text design in such cognitive terms: 'Multisensory reading relies on people's ability to collate and decipher multiple sensory streams simultaneously, much as we interpret the world around us through the use of multiple senses..." (Page 20). Authors must undertake the responsibility of mimicking the real world in the digital space, an act that can be distorted to contextualize a certain meaning. Multimodal digital narratives face the limits of technology and time, and so each element is crucial in delivering the narrative. Digital narratives provide finite perspectives on multiple realities, creating observable patterns in content creation: "... in which multimedia design and composition occurs is 'paradoxically stable and dynamic... a rich palette for perspectives that entail elements of textual structure, formal design, and referential storyworld" (Skains). Meanings can vary based on the multiple perspectives offered by the author, but each of those

perspectives holds nuancing that relates to the author's design choices. Authorial liberty is coded into the system itself. Principles of design, psychology, sound, sight, and attention all are taken into account when producing a multimodal digital narrative.

Reading

Literature is traditionally understood in the framework of the meaning words convey. Rhetoric and its devices have been well documented by many scholars, but the act of reading does not have the same importance in the digital world as it does in books. Alphabetic text in multimodal digital narratives is simply another quality of the narrative, not the exclusive mode of communication. Having multiple streams of sensory information conjoined with text changes the perception of the text. Reading text takes an active amount of focus, it is not a passive skill. Letters function in conjunction with other letters to form a word that represents a concept. Analyzing text, within a digital narrative, requires an understanding of variances in how humans read: "In English and other alphabetic languages that read from left to right, the classical gazecontingent moving window paradigm has shown that PS extends from three to four letters to the left, and up to 15 letters to the right of a given fixation position to arrive at close to normal reading speed" (Frey). Visual pacing of words is an aspect of authorial liberty, a characteristic that can distort, clarify, ornament, or inform a story. The written word has more freedom since it is not the sole vehicle for the plot to be portrayed. The act of reading can then be can be distorted into visual noise as a means of obscuring key details woven into a narrative: "Visual noise is a visual metaphor technique that can also serve to obscure. It has become popular in recent years through visualizations like the visually confusing graphics by political party representatives of

political parties to represent the "confused" policies of the opposing group..." (Hullman).

Authors must predict an audience's narrative expectations, distorting and experimenting with traditional understandings of reading's importance. The presentation of the text then can became a frame for the author's motive behind the narrative. Competing streams of information must be balanced within the frame of the author's intent, the author's choices in various, connecting stimuli need to be assessed to understand the author's motive.

The control of written information then becomes a framework for the entire story beyond the individual dissection of parts and contributes to the entire nuance of a story. New digital media have allowed for stories to be presented in different parts and different chronologies, creating the division of linear and non-linear digital narratives. Hypertext narratives offer an example of nonlinear digital narratives: "... the interruption of linearity in the recursive nature of hypertext; and, to a smaller degree, hypertext's visualization of short stories and poems on the development of ways of seeing alongside ways of reading" (Koehler 383). Platforms like Twine allow for branching, potentially non-linear narratives. Linearity allows for authorial control over what information will be displayed, in what order, and at what time. In non-linear narratives, users are forced to learn the author's navigation, taking increased cognitive requirements for retaining and contextualizing new and old information. Linear narratives do not force the audience to do the work that non-linear narratives require. Abandoning traditional story structures requires more responsibility from the reader, impacting the overall understanding and satisfaction of the narrative. Non-linear narratives require different structures to manage information dissemination and user autonomy, in a digitally shifted reality: "... traditional notions of writing are primarily focused on 'originality' and 'creativity,' the digital environment fosters new skill sets that include 'manipulation' and 'management' of the heaps..." (390). Non-linearity gives up

authorial control for directing the personalization of a story's presentation. Non-linear digital narratives provide fragmentation of traditional story structure, focusing on moments rather than one specific plot. There is an implied trust from the author to that a user will read all of the work presented, appealing to the reflection of concepts more than an overarching plot. Non-linear digital narratives have different structures from linear narratives, indicating a difference in intention by an author. Linearity appeals to the shifting reality into the digital world, whereas non-linearity shifts concepts perceived by society. Non-linear narratives focus on snapshot moments connecting to an overarching theme, where linear narratives mimic traditional plot structuring. The presence of control in each narrative type informs the framework for the composition of all multimedia elements.

Audio

Audio is one of the primary features of multimodal digital narratives. Sound is an added sensory feature that enhances the immersive qualities of a narrative while revealing an authorial intent. Timing of story-specific multimedia elements relates to increased moments of immersion meant to highlight certain aspects of a narrative: "The challenge of multimedia is to combine not just asynchronous media like text and images... but also time-dependent media like audio, animation, and video" (Rockwell 115). Management of audio is important, as it can distract from or enhance aspects of a story. Sound is immersive by engaging a user's hearing, rapidly changing a reader's sensory focus. Audio, especially differing between sections, appearing at unpredictable times can increase a user's attention to the disturbance of silence. Consistent audio present throughout the entirety of the narrative, such as background music, will slowly be

ignored by the user. Multiple streams of stimuli have to be managed by author's to create a nondraining and cohesive narrative. Increasing the presence of audio in a visually dominated narrative will distract from the visual component in favor of focusing on the audio: "Analysis of the functional connectivity between auditory and visual cortical regions in visual and auditory tasks indicated a reciprocal inverse relationship — increases in auditory activation were directly correlated with decreases in visual activation (and vice versa)" (Fritz et al.). Audio has to be managed alongside visual elements unless intentionally designed to display a narrative shift. Cohesion between audio and visual elements provide strong immersive qualities of portraying an author's intent: "... neuronal responses in auditory cortex (during a selective-attention task in which different auditory and visual cues were associated with a two-choice lever push) were stronger when visual and auditory cues were in agreement and were reduced when the bimodal cues were in conflict" (Fritz et al.). When creating a multimodal digital narrative, audio can be used to provide atmosphere, set the tone of the story, and control the dissemination of information. Audio can disorient, confuse, distract, refocus, reimagine, and recontextualize a story based on simple qualities. Multimodal digital narratives capitalize on audio's capacity to shift and enhance immersion into the digital world, through managing its presence and importance in the narrative.

Music is an example of audio that effects an audience's emotion and is crucial to the rhetoric of multimodal narratives. Music is well known for impacting the moods of its listeners, going so far as to even have physiological effects on the body: "Music associated with sad emotions produced the largest changes in heart rate, blood pressure, skin conductance, and temperature, while music associated with happiness produced the largest changes in respiration..." (Cowan 179). Physiological reactions to digital content support the immersive quality digital narratives

have. There is a physical and calculatable response to the stimulus provided by music. Music's impact on the mind allows for numerous opportunities in multimodal digital narratives. By changing the mood of a user through music, the atmosphere of the story changes with it. Mood can influence the perception a user has on the presented information or shift the user's perception of the environment. Music has the power to project itself onto others: "Entrainment is the process by which energy in one object is projected onto another to the point where the second object is synchronized with the energy of the first" (Cowan 181). The synchronization between humans and rhythm allows for authors to project onto their audience. By identifying with and synchronizing a user to the music, the user is influenced by the digital world. Audio has the power to influence a person's mood, but it can also be used for its seemingly passive qualities: "Even when music and sounds are soft, they may cause an effect that is known as *auditory* masking" (Sarı et al.). Auditory masking can provide varying levels of interpretation in a narrative, potentially altering retention and focus on other streams of stimuli. Audio and visuals create layers that can work to enhance or distract from one another, displaying an author's purpose in the presence of the two. The combination of audio and visual can act as reinforcing a message or intentionally distract from the message. Audio displays an author's attempt at controlling narrative immersion, and thus the potential reception it receives.

Visual

Computers have the capability for visual elements that are impossible to recreate on a page, allowing for animation, videos, and graphics to create visual digital rhetoric. Images, like sound, can be a tool of reinforcement, distraction, or nuance. The tone of the text and audio can seem

somewhat monotone, but the added visual of a rainy day would leave a different connotation of the scene in its context to the entirety of the narrative. In context to images and design, the interface and visuals have to reinforce the message that the author is trying to communicate: "The designer's job is to 'provide a layout that respects the motives of the writer and the reader" (Berghammer 43). Graphics and user interface design directly relate to the motives of an author. Instead of using vivid imagery to set the scene, or descriptive words to show action, the scene can be virtually presented through different media. Principles of design and production of visual elements are integrated into the author's rhetoric, controlling the visualization and thus the reception of a story. An author's message, or intent, requires an understanding of the subtilities and how different pieces of a story contribute to the whole: "In digital entertainment, the study of behavior and motivation is as paramount as it is in the study of acting and drama" (Marinelli 16). Behavior and motivation function as key aspects of digital rhetoric. An author's motivation comes from an expectation of interacting with people through a digital reality. The author has as many expectations of the user as the user has for an author. Author's can then appeal to different aspects of human's interpretation of stimuli. By playing with cognitive perception, the author has better dictation over an audience's perception of a narrative. Being able to deconstruct and engage the multiple literacies and rhetorical techniques an author employs, basic psychological principles are revealed in an author's toolkit. An example of an author's anticipation of human interaction is the utilization of human psychology relating to sight in anticipating narrative reception: "The Gestalt law of proximity states that we perceive objects that are close to each other as forming a group" (Berghammer 40). This psychological principle could be utilized to group two seemingly different characters together, characters that appear to be not connected in other elements of the narrative. Foreshadowing can then be utilized through psychological

principles of anticipating users' perception of sensory data. Details provided by visual cues can function to reinforce or contrast notions provided by the plot of a narrative, intentional detail to visual cues shows an author's control over the reception of a narrative. The Gestalt law of proximity could be used to indicate importance, foreshadow, juxtapose differences, or help guide a reader to a specific understanding of the story. Human psychology of sight and sense perception and interpretation provide authors a framework for anticipating and guiding a user's perception of reality.

Visuals add an increased cognitive load to analyze within themselves, and in contextualization of the entire narrative, forcing authors to balance information retention demand with aesthetic and plot qualities. Perception of visual elements is acquired through their observance, but memory is required for maintained visualization. Time obscures narrative details, images can act as clutter in a digital space without anticipation of users' attention capacities. Memories can fade rather rapidly, requiring image recall in a narrative acting as a particularly large demand on a potential audience: "A mental image is subject to a rapid decay, and it has even been estimated, that the average duration of generated images can be only 250 ms" (Denis 11). Timing, specificity, interactivity, and all elements surrounding visuals are then rendered crucially important for authorial control of narrative perception. Conceptualizing the entirety of a narrative by examining all of its individual parts, while retaining each set of individual analysis in context to the whole product, is an unreasonable demand for an author to impose upon a user, especially when multiple pathways are involved. Authors then can either expect a user to purvey the narrative in its entirety only once, or expect a continuous examination of the provided materials. Multimodal digital narratives must balance the two, otherwise, the content is either superficial or too abstract. Demanding close analysis of each individual

component requires lengthy durations of time, something that if performed on the first readthrough can distract from an author's intent.

However, superficial images that simply engage the sense of sight, can act as attentional clutter. Visual elements have necessary layering requirements that help balance an audience's attention and capacity for memory retention, providing the author a sensory element that can add nuance to a message. The pacing of visual elements and their frequency is critical for narrative clarity, arbitrary, frequent visuals distract from the entirety of a work. Framing visuals is imperative for incurring the benefits visual elements can provide. An image can set the mood for the entirety of a passage, but it can also function as a critical plot point, using foreshadowing, character introduction, digital world immersion, and nuance to shift an idea portrayed by plot. Each added stimulus adds a demand onto an audience, requiring processing capabilities that are dependent on focus: "Distributed 'continuum' model... The model therefore includes a vertical continuum... processing required by a task, dependent on the requirements for information manipulation, coordination, and integration" (32). Processing digital elements comes with competing sensory elements in multimodal digital narratives, context providing the foundation for categorizing the importance of each element. An author has to factor in human memory when distorting reality and creating an immersive user experience. Focusing on one digital element weakens competing stimuli from other elements, potentially defocusing a reader by presenting an information overload from one type of element. Each element requires contextualization, narrative visualization being one of the primary modes of displaying atmosphere. Multimodal digital narratives must attempt to adhere to a cohesive narrative, otherwise the narrative message is distorted. Narrative demand is factored into an author's rhetoric, revealing the layers an author has crafted to create a message in the form of a digital collage. Authors have expectations when

users interact with their work, showing the rhetorical strategies employed by images in balancing the various stimuli presented, to temper a narrative's effects upon a user.

Interactivity

Interactivity functions as the backbone of multimodal digital narratives, indirectly showing the intended structure of a narrative and thus displaying an author's attempt at distorting reality. Interactivity has to align with both digital elements and plot constructs: "In the best forms of interactive narrative, the story structure (things such as plot, timing, character, and story pacing) should have an equanimical relationship with design of the interactivity" (Meadows). Authors have to provide a framework for interacting with the system, revealing intent at controlling a user's perception of the narrative. The interface of the system allows for interaction between a narrative (which an author forms) and the audience. Narrative navigation provides different frameworks that dictate the potentially outlaying of various multimodal elements. Hyperlinkbased story navigation, like that utilized in My Body — a Wunderkammer by Shelly Jackson, depends on connectivity between links based on the non-linearity or linearity of the narrative. A non-linear narrative, like Jackson's piece, relies on connections through concepts; fragments that appear to be isolated must be contextualized through an overarching theme provided by navigating the hyperlinks. The message of the narrative is written into its navigation. Linear hyperlink narratives do not have the fragmented nature of non-linear narratives, requiring links that provide material for the plot or act as a means of distorting reality. The digital elements presented through navigational hyperlinks then must reflect the linearity of the story, either lonestanding and comprehensive, or supplementary and cohesive. Navigation styles vary, and thus

the framework for analyzing an author's designed user interface directly portrays authorial intent. Even the interface's means of moving through a story displays the author's rhetoric, clicking and swiping through different tools providing different rhetorical strategies: "Although we often see tools as separate external entities, they are best understood as extensions of the hand" (Murray 292). User immersion in a narrative is dependent on human interactivity with narrative through the extension of tools. The physical self acts upon the digital world. Methods like clicking and swiping act as a user's control over the dictation of the narrative. Clicking is methodical and predictable, controlled by the speed at which a user ascertains information. Swiping offers more human variation, creating movement that can emphasize points of transformation or distort reality. An author's intent is present in the interface's design, creating an immersive experience that relies upon author and user expectation: "The conventions of various digital genres engage fundamentally in unnatural narration, including conventional use of second-person perspective and necessary metalepsis in interactive fictions..." (Skains). Authors have to account for the limitations of multimodal digital narratives in portraying a model of reality. The unnatural nature of the second person perspective combines with a multimodal digital narratives interface to seemingly give a user autonomy. Audiences tend to have a hard time being projected onto, thus the second-person perspective tends to be initially resisted. However, by adding multiple sensory elements believability is increased through the replication of reality-modeling stimuli. These projections of reality onto the user are vital for immersion into a narrative: "When we have a conversation in a virtual plaza or kill a particularly nasty monster in a virtual dungeon, the place becomes anchored in memory by the emotions and memories associated with it" (Murray 174). The digital world creates memories that are attached to users, memories of events and environments helping to immerse a user into a story world. Multimodal

digital narratives are able to tie users with new digital realities, creating meaningful experiences as the product of effective immersion. The immersion and reception of a narrative depends on digital elements, user interface design, and the rhetorical strategies an author uses to distort perceptions of reality. Impacting a digital space creates user autonomy, mimicking aspects of reality that are projected into a narrative, thus supporting an author's control on narrative perception.

The interactivity multimodal digital narratives provide, allows authors to distort users' perceptions of reality, thus controlling narrative reception. Multiple sensory capabilities are used in conjunction to control a version of reality that users can interact with. Users can assume their own identities in digital narratives through the contextualization of an altered reality, allowing users to project onto the system itself. The user autonomy provided by user interaction with a system's interface mimics a spectrum of autonomy present in reality. The perception of physical reality and digital reality blend to create a continuum of integration based on narrative and reader perception: "... 'The trick lies in shifting the player's self-perception as the protagonist. An actor playing a role simultaneously lives inside the character and outside the character" (Mayr 47). The user exists in both realities simultaneously, living in physical reality while impacting a digital one. Users are then expected to bring in context, biases, history, and emotion from the real world that influences a digital reality. User variability comes from the user's presence in reality; multimodal digital narratives acting as spaces for users to explore different perceptions of reality. The connections formed between reality and the digital world are the foundations for authorial control over narrative perception, controlling user perception through distorting reality. Through shifting user perceptions of reality, authors inspire their audiences to transform digital realities into real change. The energy an author puts into distorting reality can proliferate the message

they put inside the work: "... the rhetorical activity of writers and the material labor of production is analogous to the input of energy per se into a natural system... that ecosystem generates relational links and instances of material cycling..." (Eyman 86). The energy an author puts into modeling and distorting reality for a desired goal can inform the power of its message through proliferation. This creates a feedback loop of constant interpretability and activity between an author, the system, and users. The author's power over persuasion is thus amplified by increasing interactivity and the blending of digital and physical reality.

Digital rhetoric is vitally important for analyzing multimodal digital rhetorics, but simply talking about concepts does not actualize their basis in fact. Aspects of digital rheotoric, however, are observable in all digital narratives. From the immersive virtual reality experience of "Cloud's Over Sidra" by Gabo Arora and Chris Milk, to linearity in *The Fall* by Alan Bigelow, all digital narratives utilize digital rhetoric. The navigation used in Alan Bigelow's *The Fall* offers tactile navigation allowing users to mimick the way in which they perceive their own lives. Concepts, however, require a fragmented singularity, each individual part requiring connecting the whole to allow increased user interpretation in My Body — a Wunderkammer by Shelly Jackson. "Clouds Over Sidra" offers limited autonomy, directly controlling user reception through immersion for an extremely specific goal, virtual reality being used to guarantee immersion into the narrative. Inanimate Alice by Kate Pullinger mixes visuals, audio, games, and navigation to create a diverse narrative that allows for education on digital literacy and multiple cultures. "With Those We Love Alive" uses repetition with dark concepts to create awareness in desensitization of oppressive topics, influencing users to believe in the totality of love over the ideology of any nation-state. Every element present in a multimodl digital narrative influences the state of a user's brain, encouraging the way the user receives the narrative. All of the

narratives I examined in documenting digital rhetoric supplied my inspiration in creating my own work "Promise of Paradise." My digital narrative was created to highlight the importance of digital rhetoric and its applications, transforming my research and literature review into a digital narrative targeting corruption in figures of power.

Literature Review

Examples of multimodal digital media help to illustrate how digital rhetoric is utilized in creating an immersive environment where an author distorts reality. One such example would be The Fall by Alan Bigelow. The story follows a man who is universally considered boring; his diet, looks, job, social interactions, schedule are considered so boring he wins awards. He feels validation from his awards, but he decided he wanted one last adventure, so he jumps out of a building many stories up. He lands on two poodles, has his title stripped away, and allows himself to experience more than his predictable boring circumstances. The subject of the story reflects tenants present through most multimodal digital narratives, manage and adapt. Contemplating life through supposed meaning plays on common societally held notions of worth. Developing a character that is framed as being the definition of boring, and having him find his purpose in averageness, combats societally impressed notions of creating self-worth through competition and uniqueness. Societal notions of life's worth are distorted, influencing users to change how they perceive life's purpose. The interface is friendly, requiring the swiping of a screen or the pressing of the spacebar to navigate. This navigation method allows the user to move through the story at their own pace, reflecting the pace at which users perceive their own lives. The audio used in the narrative mimics looking down on a busy street in the city, providing increased immersion of engaging another sense while juxtaposing the pace of the narrator's life with that of the people around him. Beige and black backgrounds are used to show the atmosphere the author is placing upon the character, beige showing how boring and neutral the narrator is, and black symbolizing his crisis which could result in death. I pulled upon this display design for my own digital narrative, "Promise of Paradise," as it creates dramatic emphasis and a dynamic visual experience. The narrator, however, has a specific hobby that presents the author's argument while shifting a user's reality. He is obsessed with studying signs at airports. He constantly looks at symbols that society dictates as having a mean. The man can recite what each sign presented means, juxtaposing the notion of a jet-setting lifestyle. Scenes in which airport signs are discussed are slow, methodical, encouraging users to analyze the disparity between what an airport signifies versus what the narrator's life means. The narrative's resolution finds the man comfortable with a boring, but average life, exceptionality at any one aspect of life proving unsustainable. He transforms after his fall, his old perceptions relating to the nature of his purpose dying in the fall, allowing him to realize what life is truly about. There is an incident of realization faced by placing the narrator in an extreme situation, something my own digital narrative does by having the user enter a meeting percieved as taking place in Pandemonium. Perceptions of societal importance are presented as dying through the transformative experience of the multimodal digital narrative, allowing for individual perception to take its place. Bigelow unravels societally-held concepts of life's grand purpose, revealing an individualistic meaning that reinforces individual autonomy when examing society.

My Body — a Wunderkammer by Shelly Jackson is another example of how multimodal digital narratives capitalize on digital rhetoric to distort perceptions of reality. The narrative's first sound of audio sounds of deep breathing, immediately framing the narrative as an intimate

exploration of the body. Jackson actively welcomes the user into examining the most intimate parts of herself in a non-linear setting. The navigation is a naked woman's body, segmented by boxes and labeled by body part, which when entered, turns into clicking links found in the passage. Jackson's candid nature allows this user interface to thrive, the content of her story mirrors the vulnerable, transformative simplicity of the navigation. An examination of each part of her body connects to her overall self-image with the puzzle of her own body. The experiences she portrays reflect aspects of human development most people understand, ultimately revealing how brutal society imagines the ideal body. Each link attached to the woman's body has a story that refers to life experience and some form of growth or understanding. The story displays feminist themes through personal experience, allowing users to project onto Jackson's narrative. Comprising the narrative around body parts reflects a fragmented perception of body image and positivity. While the narrative is non-linear and my own work, "Promise of Paradise," is linear, the exploratory component found within Jackson's navigation inspired the supplimentary narrative features that add contextualization to the entirety of my narrative. Fragments of the past help to clarify issues of the present. By choosing to fragment the narrative, Jackson mimics how humans develop ideas on body image. Each event is another experience in which a person's body has been socially commented on, creating building blocks to an overall sense of self. The conflicts provided by society and self-perceived notions are resolved through eventual acceptance, creating a powerful message for an audience to adopt. The inner intimacy with one's own body is explored in contrast to societal perceptions of the body, the conflicts starting in discomfort and ending with acceptance. The juxtaposition of society's power over an individual mixed with self realization is a theme I drew upon in my own multimodal digital narrative. What outside forces to do in terms of skewing someone's perspective on issues of self and judgement,

is a theme in both narratives. The details presented throughout the narrative at any one point reinforce the author's message, while attaching to concepts that an audience can relate to while also using the author's body as a point of reference. The author's changing perspective of her own body falls in line with most people's relationships with their bodies, the insecurities, the flaws, and the prized. Shelly Jackson capitalized on candor and intimacy to reframe her audience's reality, by using herself as an example she fights societally-created idealized bodies and their traits, creating a message of self-love and empowerment.

Gabo Arora and Chris Milk's "Clouds Over Sidra" uses multimodal digital cinematography, also referred to as 360-degree virtual reality, to shift viewers' perspectives on marginalized and hidden aspects of society. The piece's main objective is to inspire sympathy and outrage that function to support societal change. The video focuses on a 12-year-old girl named Sidra in the refugee camp Za'atrai in Jordan. The auditory component of the video builds the biological and social profile of Sidra, using her innocence and observational skills as a means of appealing to viewers' compassion. Where perceptions of reality truly shift though, is primarily in the visual component of the video. The environment presented in the video removes perceptions of society based around western civilization, highlighting humanitarian needs for the refugees who fled Syria. Dramatic shots of seemingly barren wastelands, kids playing soccer on paved ground, and the cramped nature of the camps reposition viewers to perceive society outside of their known reality. The choice of portraying this crisis through the lens of a child highlights the importance of taking humanitarian action. Using Sidra as the main character displays an aspect of growing up and coming to understand reality even when one has hope for change, a similar factor I used with creating a high school protagonist in "Promise of Paradise." Sidra provides an example of innocence that is determined to overcome the issues presented by

refugee camps, overcrowding, and a lack of resources for people displaced from their home countries. The video encourages reflection on the societal destruction of humans' livelihoods, creating a global responsibility for aiding those less fortunate themselves. There is an aspect of hope provided in the video, displaying the video's belief in human morality as a way to influence social change that could lead to a better quality of life for refugees. Background music is present throughout the entirety of the video, the music suggesting a tone of hope and deep contemplation. The video forces the audience to examine their own lives and how they would feel if put into similar circumstances, an idea used in my own work by framing my multimodal digital narrative as a moral test. By playing to emotional qualities of both visual and auditory elements, "Clouds Over Sidra" promotes social change for those displaced by society. Where "Clouds Over Sidra" addresses digital activism through the lens of those needing aid, "Promise of Paradise" shifts the perspective on figures of authority oppressing people. Arora and Milk's narrative's characteristic of virtual reality is important for the message they were trying to convey in the creation of their narrative, immersion is a key factor into sympathizing with the cause of the VR. By viewing the realities that others live, one can see the disparity between oneself and people less fortunate. "Promise of Paradise" forgoes virtual reality, not only due to the limitations of virtual reality, but "Promise of Paradise" relies on preconceived user bias. "Clouds Over Sidra" attempts to show viewers a foreign perspective of life, where "Promise of Paradise" relies on familiarity individual identification.

The virtual reality component found within "Clouds Over Sidra" is not accessible to many people. Acquiring any headset to view a virtual reality in 360 degrees, is expensive, these headsets costing normally anywhere between \$300 to \$1,300, which is a lot of money for a relatively new medium, that is currently a niche. In my own experience with these headsets, the

distortion of reality is nauseating, your brain not fully being able to adjust to the virtual reality. The longest I've been able to experience any one of these experiences is thirty minutes before I was nauseous for the rest of the day. Virtual reality is not the current dominant trend in user consumption of entertainment because of how inaccessible it is in terms of compounding costs, the computer, the headset, potentially headphones, high-speed Internet, and sometimes a large amount of space. In the future, these narratives might be more accessible, but that would only occur with further development of the virtual reality headsets, and reduced costs and manufacturing and supplying. Until then, it is something of a novelty experienced by those with discretionary income. Though, it important to note that the virtual reality component of the narrative does beg the question of who the intended audience is for the cause. Since virtual reality is so inaccessible, the question of socioeconomic class filters into the rhetoric provided by "Clouds Over Sidra." The narrative is advertised as being a virtual reality film, seeming to outwardly expressing the necessity of VR. The film was developed for the United Nations, attempting to engage the audience into helping aid relief in a humanitarian crisis. While virtual reality acts as a capitvating use of emerging technologies, it is inaccessible as a whole, gatekeeping content that requires increased financial spenditure, and investment in technological literacy.

"Clouds Over Sidra's" inclusion of virtual reality requires examination of human sentiment towards technological advancement. Virtually reality is also so new it is a confrontation of the way humans perceive reality. The amount of movies, novels, and entertainment that focuses on escaping a simulation has not provided people with the best predispositioned responses to virtual reality. The distortion of reality visually then leads to the possibility of mimicking other senses that could then function a fully-realized digital simulation.

This brings up philosophical and ethical concerns, ones that people have been conditioned to be avoidant of virtual reality: "The Uncanny Valley is a term used to describe the relation between simulation fidelity and likeability" (Gregory et al. 152). The technology for virtual reality is not seamless and so that seam causes a disconnect in people observing a digitally constructed, virtual reality. The concept of the Uncanny Valley applies to user's discomfort with virtual realities, underscoring the current issues found within the technology: "In general, as the simulation approaches perfect fidelity likeability ratings increase until some point just prior to perfection, where ratings drop... then rise dramatically when perfection is theoretically achieved" (152). When distorting reality, it is fair to say that, the more closely the virtual immerses a viewer into a world, the more uncomfortable a user will be. That is up until the point of full, perfect immersion. Virtual reality is then at the mercy of user comfortability and investment into technology. A large portion of of the western world is not completely comfortable with virtual reality, requiring an understanding of digitally-based realities.

Inanimate Alice, by Kate Pullinger, is an episodic multimodal digital narrative that follows a developing game designer and her digital best friend Brad, the text educating students on digital literacy as well as digital content design. The narrative is visual, audio, and interaction heavy, allowing the viewer to interact with animations and games that Alice Field, the protagonist, makes. The narratives are educational opportunities to explore digital literacy and transcultural media. The episodes focus on different locations, different cultures, countries, and identities being explored. Places like China, Russia, Italy, England, and more are explored in the series. The multimodal elements of the narrative create an immersive environment that displays more than the protagonists says. The visuals become vital for understanding the story, visual stimulation being one of the primary features for delivering the narrative. Alice doesn't question

her dad in the first few episodes, yet the viewer has an uneasy feeling about what the dad actual does for work, fires being displayed on tops' of oil-drilling equipment. "Promise of Paradise" uses this same ambiguity in identifying the hellish faces behind the mask of human appearance, the actual nature of each character revealed after the user attempts to identify them. The atmosphere of Pullinger's work is displayed through multimedia elements, visuals contributing heavily to the context of the story. I drew upons similar themes of disonnace and unease in my multimedia composition, focusing on setting the tone and the visualization of each scene's narrative importance, while identifying key concepts not expressedly written. The narrative requires equal attentional demands to text as much as videos, teaching students different management skills and techniques for producing a multimodal digital narrative. The immersive quality of the narrative, viewing snapshots of memories and feeling the anxiety created by the music, allows for increased focus on different dynamics in different situations, while also implementing elements of music from the place the story occurs. *Inanimate Alice* proves a valuable resource in education of not only digital literacy, but of cultural perspectives as well. These qualities display the power of multimodal narratives in real-life applications, able to inform and shape perceptions of reality and how users interact with the world around them.

The Twine narrative, "With Those We Love Alive" by Porpentine, capitalizes on user immersion to shift perceptions on love and romance when viewing the LGBTQIA+ community and society. Shifts in reality and key points of the narrative plot are accompanied by noticeably different music, and sometimes changing slide colors. This cohesion was utilized in my own multimodal digital narrative, sound and coloring emphasizing the importance and atmosphere of each scene. These passages provided breaks from the limited offering of atmosphere-based reality modeling provided by many of the opportunities presented between starting a new day.

Sleeping moves the story along, but there is a lot of variabilities that eventually seemingly appear repetitive throughout the story. The number of sleeping options required to move the story along, along with environmental variabilities, forces the user to look for clues continuously throughout the interface. The tasks would seem to become mundane, no matter how gruesome they are, they are desensitizing, but they function to create an even greater importance surrounding the main character's primary relationship. The protagonist is displayed as either a feminine-presenting non-binary or transgender character, and the relationship she has is suggested to be with is also a transfeminine. The inclusive and LGBTQIA+ representative presentation of Porpentine's work, and those like it, inspired the presentation of identity in "Promise of Paradise." The character central to displaying corrupt authority is M, a non-binary person of color. These qualities were given to M to display the domination that traditional, antiquidated, and regressive ideas have over society as a whole, as well as which groups tend to be pushed to the margins. In "With Those We Love Alive" the gruesome environment in which the protagonist works is framed as oppressive and tyrannical. With the help of her partner, the two escape after making an attempt on the ruler's life, freeing themselves from the chains of society through love and letting go. By distorting to reality and reflecting society through the lens of monsters, the consuming nature of social persecution and atrocities, the user is framed to reevaluate notions of love and acceptance in society.

Promise of Paradise

"Promise of Paradise" is a multimodal digital narrative created on Twine, framing corrupt power through an aspiring high school student, one that is hell-bent on leaving a town

filled with poverty and hopelessness. The user takes control of the main character, going through a week of school while trying to navigate hidden concepts of power and its corruption. When writing the main character I chose to cater to corrupt authority's distaste for diversity, basing the main character loosely around a white, male, cis-gendered individual, though no clear and specific attribution is made. Throughout the narrative, the system comments, judges, and explains the situation to the user. From conforming to the principle's threats of damnation, to entering a hellish courtroom, and either supporting racial discrimination or combating it, users may be judged on their morality. How important each decision the user makes is not easily determined, requiring replaying the narrative to understand how autonomy is contrived based on user expectation of free will.

Throughout the duration of my research, I have composed the multimodal digital narrative, "Promise of Paradise," through the platform Twine. To illustrate the findings of my research, the narrator is the character implemented as the system, allowing the user to be addressed in a second-perspective and the users actions being imposed upon the user by the narrator. A sense of autonomy is created through utilizing both inconsequential and narrative-altering decisions, reflecting decision-making in real life. These moments of user interaction reinforce immersion through narrative repercussions. Different endings and options are available based on the different paths a user can take, creating a digital world of action and consequence. Autonomy is, however, an illusion crafted into the system, as it is with all other multimodal digital narratives. There are finite options and paths for a user to choose from, similar to how the plot contextualizes imagined autonomous self-control. Certain options receive the same result, reinforcing the contrived and ambiguous nature of autonomy. The system's interface and navigation reflect the content of the plot to distort a user's perception of power and control in a

social context. The endings of each pathway frame the user's autonomy, or lack of thereof, in terms of corrupted power, altering perceptions of suffering, sacrifice, and silence.

"Promise of Paradise" was made to illustrate what my research findings support, while allowing me to create my own system designed on shifts in perception. I feel that it is important, in this age of immediate information access, to expose what has historically stayed hidden behind closed doors. Propaganda and nationalistic brainwashing has, at least to some extent, lessened with increased dissemination of information. Having grown up in a politically divided society, propaganda, rhetoric, and false promises have veiled corrupt authority. Numbers, data, and facts have all begun to shed light on issues with corrupt figures in power. The problem is, one has to know where to look for it. With political ideology factoring into the majority of people's lives, removing oneself from the polarized opinions of authority is nearly impossible. By distorting the perception of reality, and assessing a user's morality, judgement is passed on one's participation or lack thereof in the face of power. I decided that I would create "Promise of Paradise" as a way of utilizing my analysis on digital rhetoric and applying it to a digital activism context, commenting on society's perception of authority and corruption.

Composition of "Promise of Paradise"

"Promise of Paradise" focuses on distorting users' perceptions of reality, in both the digital and physical space. Through a collection of images, some drawn while others are edited, the visual elements provided are used to evoke a distorted space. Moments pivotal to the final judgement of the user, and pivotal points to the story are characterized by changes in visual

elements. For example, when the user is at the meeting, the first animation since the introduction will appear, highlighting the importance of the presented scene. Photography, drawings, and animations are balanced to percieve shifts in reality as a result of testing one's morality, reflecting a shift in perceiving reality. The written text reinforces the blending of reality with concepts of corruption presented in the visual elements of the narrative. Upon exiting hell, the images of previous passages are distorted, the meeting in Hell providing a transformative experience for the user. Reality and the divine are balanced, similarly to the autonomy of the narrator and the user. Allusions to different and events and works, such as John Milton's Paradise Lost, reinforce a sense of distorted reality, double meanings appearing throughout every aspect of the digital narrative and Milton's poem. The narrative plot focuses on the disillusionment of the user, investigating how power is attained and how power is inherently corrupting. By undergoing the trials presented by the story, the user is forced to confront passive observance and active deference to corrupted power, noting the price at which power comes. The three endings provided by the story were made to create different perceptions of authority and morality. One is outwardly disobeying those is power, leading to the crushing weight of their influence that destroys the user's future. The second is the active participation in corrupt authority, the selling of one's morality while the decisions made during the narrative question the user's motivation for helping spread corruption. Finally, the last ending is a middle-ground, a gray area of passive observance but quiet indignation, something that could be seen as problematic but potentially society-changing in the future. Themes of race, drug abuse, misogyny, and trauma are present throughout the story, forcing the user to confront real-world issues through the lens of the aspiring elite. "Promise of Paradise" aims at distorting societal perspectives of authority, challenging the placations people are told to stay willfully ignorant.

The videos I made were intended to highlight key features of immersion in my multimodal digital narrative. The 'songs' I composed using the app *GarageBand* and would overlay them with different speeds and volumes, to create disorientation and acute awareness of the animation being played. The specific focus on isolated piano notes increases tensions and anxiety building, almost like the threatening-anticipatory notes before a jumpscare. I slowed down the audio of my voice to create a seemingly powerful, otherworldly, depiction of the system. I created the audio to suggest the nature of each moment, to enhance the weight of each highlighted moment. The videos that combine both animation and sound, relay how important each piece of the story is, the moments where the story is being defined. The passages between each of the moments highlighted by videos, are less dynamic, forcing the user to actively maintain focused reading to obtain all narrative points. Passive observance, a concept found and condemned in the narrative plot, is equally condemned in the system itself. Autonomy is only afforded through action, not passive indifference.

"Promise of Paradise" is written in the second person narration style to further user immersion, and increase user responsibility for making decisions. Relying on what the system to show a user what is happening, isn't feasible, the user has to find that information out for themselves, mirroring society. Multimodal digital narratives that confront societal norms or figures of authority are important for accountability, independence, and autonomy in daily life. Texts that confront perceptions on socially-realized traditions are important for disemination of new perspectives, potential social change, and the creation of a global community. "Promise of Paradise" is framed as a test, where passivity provides for continued corruption. The plot of the narrative is used to elucidate how a user understands navigating corrupt power structures. Users must explore newfound power through dealing with corrupt figures of power, venturing into a

beaurocratic hell to cement the user's position among the elite. What the price the user has to pay is based on the actions taken in relationship to moral responsibility, multiple endings either condemning or being ambivalent towards the user. How the user ends the narrative then can act as reinforcement for the way that the user went about reading the narrative. Addressing the user through the second person allows for a personal and introspective experience that requires reflection on society, power, and transparency.

Twine, Accessibility, & Activism

I chose Twine as the platform for the creation of "Promise of Paradise," utilizing a more accessible medium of multimodal digital narrative creation. Twine is a hyperlink text-based platform, creating different passages linked through different words. The program is free to use, allowing for the inclusivity and diversity present throughout the Twine community. Marginalized groups such as the LGBTQIA+ community have used Twine for digital activism. The increased representation of underrepresented communities provides new perspectives on social commentary and perspectives on marginalized communities. The platform's history with accessibility and inclusivity inspired me into wanting to portray issues of marginalization and oppression through the lens of a potential oppressor in my own work. Twine offers the chance for anyone with a stable Internet connection and a laptop to create a digital narrative, allowing a vast range of perspective to make content on a variety of topics. Twine, however, is as equally inaccessible as it is accessible. The functions programmed into Twine's author interface are limited, much of the system's individuality relying on the author's knowledge of difficult coding concepts in both CSS and JavaScript. While there are different variations of Twine story

formatting, such as Harlowe 2.1.0 and SugarCube 2.31.1, story formatting is one of the most difficult and alienating aspects of Twine. Each story formatting type has different rules, requirements, and features, making story formatting hard to navigate and translate across formats. Most features outside of writing simple text requires coding syntax that changes based on story format. An example from my own work is using an image as the background for a passage. Story formatting matters, SugarCube and Harlowe have different syntax standards, and variations of each format have even more individual syntax requirements. Without extensive coding skills, creating multiple elements that create the perception of user autonomy in a modeled reality is nearly impossible, forcing the grueling process of manually creating what could have easily been executed by code. A six-question path can proliferate into 40+ passages of content that not only disorganize an author's design layout, but also requires entire story restructuring. Twine is a useful tool, actively used in digital activism by underrepresented and marginalized communities, but what is offered is reflected by its price tag. The basics are presented, but all of the individuality has to come from the author, allowing for underrepresented communities to thrive in this indivualized space.

Representation in gaming and mainstream narratives has notoriously been uninclusive, posing the same faces, colors, and identities onto different characters in various games. Multimodal digital narratives, and their inherently autonomous nature, have provided diversity within entertainment, especially in terms of gaming. Twine as a platform is notorious for its inclusivity, the LGBTQIA+ community utilizing the platform to expand representation in gaming: "... the so called Twine Revolution could be started in 2012. It is a movement started by trans women, and then was expanded to other queer identities as well, arguably one of the most relevant resistance efforts in gaming" (Bragança et al. 938). Twine has functioned as a platform

for inclusivity and representation in marginalized communities. The LGBTQIA+'s representation is also indicative of opportunities and potential futures where other communities can create diverse narratives: "... intersectional studies, about representation of other minorities, regarding race, class, nationality and people with disabilities" (944). The main reason I chose Twine as a platform to create my own work stems from its inclusivity and its accessibility. Also, the LGBTQIA+ related stories have set a precedent in the depiction of society's relationship with individual groupings: "... protagonism of trans and non-binary characters, who were at the center of the narratives on all four games, while they tend to be only supporting characters and villains when represented in the medium" (944). There is a trend among many LGBTQIA+ related Twine narratives that features main characters working for or deferring to other people. The protagonist of the narrative complies to societal power, and those that would influence them. "Promise of Paradise" capitalizes on the idea of the nature of societal influence and what it means to participate in upholding that influence. By working for someone else the protagonist is indirectly supporting the oppression and discrimination presented in "Promise of Paradise's" authoritarian characters. My multimodal digital Twine narrative comments on the morality of passive observance or active participation in corrupt and oppressive power, acting as multiple perspectives for those that would further, defy, or quietly plot for change. These narratives that shift societal expectations through perceptions on marginalized communities, lead to potential social change in the form of digital activism, highlighting the struggles and hopes of communities usually kept in the dark.

Societal implications

The blending of the digital and physical world allows for the potential to create real societal change based on an author's success at spreading their message. Accessibility in multimodal digital narratives makes the audience pool potentially large enough to fuel entire social movements. The ability to access digital multimodal narratives allows for the mass communication of a message or specific purpose. Digitization of information has capitalized on this opportunity to be able to spread a message to a vast amount of people through a controlled form. The transfer of ideas almost instantaneously over a network allows for a community to rise around central ideas: "Whereas print created the need for new opportunities for solitary reflection, digital media create new kinds of social spaces" (Waite 30). Online communities can be built around the media that inspires them, even ranging in vast categories, spanning from environmental issues all the way to online fandoms of popular celebrities. The individualized nature of Internet perusal allows for a new type of commraderie to be formed beyond a limited, nation-state based audience. With the Internet, the transmission of ideas is nearly instant, offering a larger potential community built around specific ideas: "A comparison of the consequences of print and the emerging consequence of digital media illustrates that shift from an individualistic perspective to an emergent awareness of the larger group" (25). While the digital world offers an experience that integrates a user in a seemingly individualistic way, the digital world also provides the opportunity for global communities to rise around different art, media, and stories. The formation of geographicall-delocalized communities surrounding a narrative or piece of information allows for digital activism.

Digital activism utilizes the potential for mass distribution of information, capable of shifting social discourse through sheer power of distribution and appropriation. The blending of the individual and the digital world allows for the transference a personalized message across a

virtual screen: "The virtual world, now more clearly than ever before, resembles real life, much more so than the stage or screen" (Marinelli 20). Reflecting the real world in a digital narrative creates a crucial connection between the material and the viewer. The person viewing the digital world content is supposed to feel a connection to the physical world, and that interaction creates an invaluable population of support for real-world change communicated in a digital context. Digitally-inspired activism can be used to change various areas of society, environmental activism capitalizing on the power of digital activism. In relation to climate change, multimodal digital narratives tend to portray only one side of an argument, showing the potentially polarizing nature of the digital sphere: "When it comes to communication, these films are concerned with communicating one perception of the environment, that of the protest movement opposed to mining industry..." (Cocq 63). Digitally activist climate change multimodal digital narratives tend to rely on the image of displacement and destruction, hyper-focusing on the damaging effects of climate change. Messages of foreboding and unknown fates shift viewers' perspectives into seeing climate change as an immediate threat to all life on Earth, condemning the damaging effects that capitalism has on ecology. Digital environments allow for the focused funneling of information to support any number of specific opinions. The material can be polarizing, capitalizing on digital rhetoric to invade the minds and opinions of an audience. Material can then be recycled and appropriated by a community, especially when there is a large following of people that share similar ideas with the author. Disbelievers in climate change tend not to dominate these digitally-controlled spaces, displaying a narrow pool of counter-perspectives. Multimodal digital narratives living on the Internet take on properties of the Internet, using information, studies, research, and societal trends recorded on the Internet to acquire dominance in societal perceptions on various topics. The ability to create a niche digital community allows

for input in societal change, a power utilized and potentially advanced by multimodal digital narratives.

Niche communities that utilize multimodal digital narratives create ecosystems of content and data presented to larger communities. Multimodal digital narratives then function as a source of social capital, being exchanged between community members and prioritized within the community: "Economies of circulation, then, must account for both the use-value and exchangevalue acquired by rhetorical objects as they circulate... as well as the social capital these works are exchanged for by their authors and appropriators" (Eyman 92). Authors' narratives are a means of trading and exchanging social capital and thus increasing investment in a communitybased mentality. Every person in the community has the ability to advocate for the community and gain social influence through digital advocacy. The potential global aspect of digital narratives allows for diverse perspectives, increasing variability and ideas in digital communities: "... it is argued that digitization enables and intensifies processes of circulation, flattening de-territorialization, and de-differentiation, and for new kinds of objects, subjects and practices to become emergent and convergent in a transition from analogue to digital cultures" (Hand 17). As people who have previously have not been active users of the Internet enter digitally-based societal discourses, more cultures communicate and are reimagined in conjunction with the entirety of the world. Geographic distance and obscurity can be overcome through digital narratives, the Internet providing an accessible and uncensored place for diverse narratives. Communities hidden from he gaze commercialized literature could attain a farreaching audience, acting as a recording of history and culture in any specific community entering the digital world. Issues ranging from those present in the U.S.A. can be related to countries from around the world, as the digital world allows access to an indefinite network of

people. Digital narratives then shift the framework of experiencing life, understanding the human condition and the world through a sense of digitalization and mediatization: "This entwinement and interplay between the videos and social logic of the debate illustrate the 'new social condition' defined as mediatization..." (Cocq 66). Problems and aspects of life that have not been previously publicized and disclosed to the same degree are now available for research almost instantly to anyone with an Internet connection. Narratives, which can mimic life or relate messages pertaining to life, acquire an even more personal connection to users as the digital activism of the Internet attempts to connect with global usership. Multimodal digital narratives quality of social commentary can be used as a framework to shape cross-cultural societal discourse.

Teaching

Narratives that use multiple streams of data rely on the education of information to create an effective multimodal digital narrative. The Internet allows for digital resources to be accessed and analyzed, allowing for the accruement of information across the globe. Accessing digital resources has allowed for multimodal narratives to enter the field of education, creating new ways of teaching, a common practice being matching modality: "... the process of using both the audio/verbal channel and the visual/pictorial channel to convey new information, fitting the particular type of information to the most appropriate channel" (Brame 3). Matching modality grants a potential increase in user retention of displayed material. By matching the audio and visual stimulus provided by a digital narrative, the two sources of stimuli can reinforce understandings of each other through matching messages: "This is in line with the *dual coding*

theory, which proposes that the information-processing system is assumed to contain two channels—an auditory/verbal channel and a visual/pictorial channel—thereby enabling simultaneous processing of visual and narrative information in short-term memory" (Sarı et al.). The two enter the short-term memory and reinforce each other if coded into long-term memory. Both stimuli support each other and therefore do not provide conflicting information that creates cognitive dissonance. Sensory reinforcement of intended topics controls the composition of digital educational narratives. Narratives like *Inanimate Alice* rely on cohesion to maintain user focus and immersion for cultural and digital education. Conflicting information can distract from information retention and cloud details provided on the topic: "In digital books that are less carefully designed than the target books in this study, details unrelated to the story line may also be animated, in which case we hypothesize that these additions promote extraneous processing, which may easily distract attention from the main message in the narrative" (Sarı et al.). Narratives must be meticulously crafted if they wish to be integrated into a classroom setting. Narratives like *Inanimate Alice* created dynamic guided digital narratives that can be used for education, the digital narrative educating students on digital literacy and different cultures. The narrative's quality of immersing students into a digitally constructed reality challenges preconceived notions of the human experience. Inanimate Alice displays different locations and different aspects of multiple cultures, while creating investment in understanding digital rhetoric, forcing students to challenge the way they perceive life around them. By exposing students to different perspectives and technologies, multimodal digital narratives become interdisciplinary forms of communication, promoting individual reflection and growth.

Stimuli that reinforce each other can increase understanding of pertinent information that progresses educational development. Not only can multimodal digital narratives offer stimuli that

help in retaining content-related information, but they can challenge how people are trained to understand the world. Traditional ideas of education are challenged by multimodal digital narratives through varied user interpretations. The transformative nature of multimodal digital narratives allows for reimagining how information is communicated to students. Characteristics of digital narratives have been prematurely accounted for as distractions, as stimuli that blur the intended focus of a class. The separation between modernity and traditionalism are often conflicting philosophies, but as the world progresses and change, people who do not adapt tend to fall to the wayside. Education in the United States of America has generally adopted various new technologies, appropriating new technologies to shift traditional educational ideologies into the modern day contexts: "It is, in other words, an instrument that blends optics and esthetics, symmetry and surprise, structure and creation. A kaleidoscopic laboratory challenges students to both 'explore unfamiliar technologies' and to 'defamiliarize those we think we already know'..." (Cordell et al. 4). Adopting new education materials challenges traditional education in terms of both students and educators. New technologies must be learned and seamlessly integrated into the classroom, challenging how a classroom looks, while new technologies challenge the traditional by requiring modern adaptation. These new tools require new literacies, ones that coincide with how humans perceive reality: "Instead, 'Competencies generally associated with the study of literatures and languages are ... mobilized in new domains and situations, with different effects" (8). Literacies that are normally developed in one field, need to be developed by all for effective communication using modern technology. By managing multiple streams of stimuli, the art of content creation must be aligned with features of humans' cognitive processing capabilities. Sensory information provides the foundation for information contextualization, allowing for complicated concepts to be disseminated through paced information portrayal in

digital spheres. Multimodal digital narratives are powerful tools of education, tools that can be influenced to distorting and managing humans' perceptions of reality and society.

Therapy

The ability to alter a user's reality is powerful in distorting individual perception, proving extremely useful in therapy. The digital world can act as a model for the real one, allowing for humans to project themselves into a digital reality. When used as a therapeutic tool, multimodal digital narratives can be extremely valuable, letting users identify with characters that can guide them: "FearNot! is a virtual role-play approach with autonomous agents as social partners in scenarios related to exploring coping strategies for bullying" (Mayr 79). Users are allowed to explore concepts and realities with digital social partners that have no basis in the real world, allowing a reality free from the consequences accrued by honesty and experimental exploration of circumstance. Multimodal digital narratives allow authorial portrayal of different realities to a user, giving the author influence over a user's perception of reality. By confronting real-world situations in the controlled environment of the digital world, a virtual learning experience becomes a tool of education and emotional development. Influencing the way a user thinks allows multimodal digital narratives the unique privilege of potentially preventing long-term effects through shifting frameworks of perception: "The main objective of FearNot! is to use the systems immersive power to fight bullying in schools and thereby prevent long term effects such as academic regression, social anxiety and somatic and psychiatric symptoms" (79 - 80). By providing a version of reality relating to bully, and then discussing coping strategies, the intensity of different adverse mental health issues can be combated. Not only can bullying be

targeted, but other emotionally straining situations have been targeted by multimodal digital narratives. Any different range of mental health issues and mental strains can be the topic of multimodal digital narrative content: "... Carmen's Bright IDEAS. It is intended to help mothers of paediatric cancer patients to deal with the strong emotional, physical and financial strains they face" (76). Multimodal digital narratives, especially the reality-imposing technology virtual reality offers, have the unique opportunity of offering different stimuli and not needing to hold to linearity. The media itself can provide a multi-layered experience reflecting the multiple different strains present in a user's perception of reality. Therapeutic digital narratives can contemplate more than one psychological issue at a time, being able to guide self-realization and productive decision-making skills. Offering a digitally-modeled reality allows for user freedom in exploration of digital reality. Users are allowed to be candid and thus respond to figures in the digital reality more authentically than they would autonomous individuals found in daily life. The variability and opportunity presented by the form allow for deep self-reflection, forcing users to learn about how they individually understand reality: "The goal of the system is... the user should empathise with the character and learn problem-solving skills from her, without having to make demanding decisions herself" (77-78). Allowing a person to project onto a digital character can provide a cathartic experience as well as an educational one. Digital narratives how the power to shift realities, proving increasingly useful in understanding and modifying human perception in areas of psychology.

Multimodal Digital Narratives and the Modern Day

Multimodal digital narratives can, theoretically, reach communities globally and thus form global communities, but digital narratives face the issue of societal limitations. Modern-day Internet availability and usage have increased, but the Internet is by no means globally accessible: "Concerning the global reach of the medium (and made possible through social networking), we should not forget that the digital divide also excludes a large part of the world's population from real access" (Llamas 235). Internet connectivity and availability vary based on geographic location, socioeconomic status, and different perceptions of technology throughout various human societies. The digital community excludes a large number of people, keeping those with minimal to no access to the Internet out of global societal discourse. Multimodal digital narratives allow for a greater capacity of immediate user access globally, but the digital world is not universally accessible. Beyond the basic issue of Internet accessibility and usage, computers are not currently capable of transcending cultural differences: "... not enough for them to be comprehensible at a global level or to communicate globally, because technological code is not sufficient for semantic comprehension..." (235). Code cannot necessarily replace linguistic differences between languages. The specific nuances of certain words, terms, slang, symbols, and other aspects of narratives do not necessarily translate cross-culturally. There are capabilities of translating languages in the computer, but they are not able to always replicate the meanings provided by different languages: "... the automatic self-translations are sometimes so literal that they produce the effect of alienating the texts..." (236). The nuance, and thus intent, the author gives can be lost in translation, limiting the true global capacity of digital narratives. Certain cultural boundaries cannot be fully bridged by the capabilities of current technology, differences in language, traditions, symbols, and even dialect pose as insurmountable problems for global uptake. Digital narratives currently offer limited potential for global digital community creation, but there are too many cultural barriers and physical limits to create a truly global discourse.

Conclusion

Multimodal digital narratives are a developing form, requiring exploration of digital rhetoric in conjunction with human perception to understand the power of societal influence provided by these narratives. With computers being continuously modified and advanced, as well as increasing Internet accessibility, digital narratives are viewable within a couple of keystrokes. These digital narratives are theoretically removed from geographic location, allowing immediate access to digital content. Digitization of narratives recontextualizes the plot offered by a narrative, allowing for dialogue between a user and system. The opportunities multimodal digital narratives present, as well as the newness of the form, have created renewed interest in digitalizing aspects of reality. The blending of reality and the digital occur as dialogue between system and user is developed, requiring a necessary reframing of rhetoric in a multimodal, digital context. The multimodal nature of digital narratives positions text as one of many elements that contribute to the plot, allowing greater freedom in employing text. Sound can be used to enhance or disrupt a narrative, controlling emotional response and engaging with a user in another form of sensory stimuli. Visuals, including videos, can help reinforce the information presented and actively display an author's attempt at controlling a user's reality. Interactivity functions as one of the cornerstones for digital multimodal narratives; interactive elements provide an immersive experience that seemingly personalizes the reception of a work. Current trends among multimodal digital narratives cement themselves by altering reality, imparting a specific

individualized message among every user. I have explored these trends, along with the digital rhetoric of narrative composition, in my own activism-based digital narrative, "Promise of Paradise." Digital activism capitalizes on digital rhetoric, utilizing the aspects that make multimodal digital narratives potent in both education and psychology. By shifting individual perception across a global community, multimodal digital narratives can inspire change within the context of reality. These advantages in persuasion and communication, though, are not met without difficulty. There is, in the 21st century, a large population of people who do not have Internet access. In the future, more and more people could potentially have access to the Internet, allowing for a greater global discourse, and increased development in the multimodal digital narratives' applications. As multimodal digital narratives develop, more fields will utilize them and transform them, implementing different disciplines to be able to connect to or influence a global audience. With the addition of new cultural groups joining the Internet, computers may eventually be able to bridge cultural divides through increasing technological capabilities, such as increasing satellite broadband opportunities, to create a more comprehensive global community. While multimodal digital narratives, especially virtual reality, are currently inaccessible through cultural and lingual barriers, technological development may further the creation of a truly global community. However, as technology develops, like in the instance of virtual reality, concepts such a religion, philosophy, and propaganda will have to be confronted by he general population to overcome social misgivings with emerging, immersive technologies. But with how quickly the Internet and multimodal digital narratives have developed, there is still future hope for a judgement-free, nation-state bias absent, inclusive, global space.

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