

https://dspace.org/

Creating interactive fiction as a medium of digital storytelling: a creative investigation of computer-based narrative construction

Mogale, Sakhile

2023
https://hdl.handle.net/10539/36093

Downloaded from a DSpace repository. https://dspace.org/

Creating Interactive Fiction as a Medium of Digital Storytelling: A Creative Investigation of Computer-based Narrative Construction

Name: Sakhile Mogale

Student Number: 2294032

Course Code: WSOA 8000A

School: Wits School of Arts (WSOA)

Department: Digital Arts

Institution: University of the Witwatersrand

Ethics Waiver Number: HRECNMW21/02/03

PLAGIARISM DECLARATION

I Sakhile Mogale (Student number: 2294032) am a student registered for the degree of Master of Arts - Digital Arts by Research in the academic year 2022.

I hereby declare the following:

- I am aware that plagiarism, that is the use of someone else's work without their permission and/or without acknowledging the original source, is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the words, thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.

Signature:  Date: **16/01/2023**

TABLE OF CONTENTS

LIST OF IMAGES **iv**

ABSTRACT **viii**

SECTION 1: INTRODUCTION **1**

SECTION 2: THE TENETS OF INTERACTIVE STORYTELLING **14**

2.1 Dotting the I's and Crossing the T's of Interactive Media and Digital Storytelling 14

2.2 Theoretical Framework 18

2.3 End-User Tenets of Interactive Storytelling 21

2.4 Author/Creator Tenets of Interactive Storytelling 32

SECTION 3: CREATIVE PRACTICE PROCESS **39**

3.1 General Overview 39

3.2 Twine Creative Process 40

3.3 Ren'Py Creative Process 58

3.4 Interactive Website Creative Process 69

SECTION 4: REFLECTION/SYNTHESIS **86**

4.1 Reflective Analysis of End-User Tenets 86

4.2 Reflective Analysis of Author/Creator Tenets 110

4.3 Lessons 117

SECTION 5: CONCLUSIONS AND RECOMMENDATIONS **120**

LIST OF REFERENCES **123**

APPENDICES **127**

LIST OF IMAGES

Figure 1: Interactive Fiction and Digital Storytelling Core Tenets (Mogale, 2021) **20**

Figure 2: Dimensions of User Experience (Roth & Koenitz, 2016) **23**

Figure 3: Interactivity as a Product of Computer Mediated Processes and Player/User Actions in Gaming Environments (Mogale, 2022) **28**

Figure 4: An Interactive Storytelling System (Kim, Moon, & Han, 2011) **33**

Figure 5: Linear Representation of Interactive Storytelling Systems (Mogale, 2021) **35**

Figure 6: Twine Storyboard Interface Display (Mogale, 2022) **42**

Figure 7: Illustration of Twine passages and the links/nodes that connect them (Mogale, 2022) **43**

Figure 8: *Malagwane Ruins Odyssey* passage front-end interface, with links (Mogale, 2022) **44**

Figure 9: MSCU Headquarters Twine passage (Mogale, 2022) **45**

Figure 10: Illustration of HTML div element (Mogale, 2022) **46**

Figure 11: Illustration of story stylesheet (Mogale, 2022) **46**

Figure 12: Illustration of CSS styling (lack of) with omitted curly brackets (Mogale, 2022) **48**

Figure 13: Twine Story Formats (Mogale, 2022) **49**

Figure 14: Harlowe Version 3 Story Format Visual Interface (Mogale, 2022) **51**

Figure 15: Chapbook Story Format Visual Interface (Mogale, 2022) **51**

Figure 16: Tabulated Visual Aesthetic Contained by <<nobr>> Macro (Mogale, 2022) **52**

Figure 17: Sugarcube Story Format <<nobr>> Macro Contains User Choices (Mogale, 2022) **53**

Figure 18: Harlowe Story Format Rendering Error with Sugarcube Macro **53**
(Mogale, 2022)
Figure 19: Images as part of Affordance the Twine Platform Provides **55**
(Mogale, 2022)
Figure 20: Image not rendered properly on Twine when user is offline **57**
(Mogale, 2022)
Figure 21: Ren'Py Launcher Interface Screen (Mogale, 2022) **60**
Figure 22: Ren'Py jEdit Editor Utilised for Story Game Input Elements **61**
(Mogale, 2022)
Figure 23: *Malagwane Ruins Odyssey* Project Menu (Mogale, 2022) **62**
Figure 24: Ren'Py jEdit Backend Story Configuration (Mogale, 2022) **63**
Figure 25: Scene Machine with Fade Visual Appearance (Mogale, 2022) **64**
Figure 26: Ren'Py Dialogue-centric Approach to Immersive Storytelling **66**
(Mogale, 2022)
Figure 27: Interactive Choices Add to Player's Immersive & Interactive **67**
Experience (Mogale, 2022)
Figure 28: Behind-the-scenes Interactive Menu Choice Options (Mogale, 2022) **68**
Figure 29: Anatomy of a Website Domain (Mogale, 2022) **71**
Figure 30: Market Share of Top 6 Content Management Systems Between **73**
2012 – 2022 (Mogale, 2022 – Inspired by Wibowo 2021, tooltester.com) (Wibowo, 2021)
Figure 31: Top 10 Content Management Systems by Market Share (Miller, 2021) **74**
Figure 32: Admin Login Area for *Malagwane Ruins Odyssey* (Mogale, 2022) **75**
Figure 33: WordPress Dashboard Panel for *Malagwane Ruins Odyssey* **76**
(Mogale, 2022)

Figure 34: Media Library Contents for *Malagwane Ruins Odyssey* Repository (Mogale, 2022) **77**

Figure 35: Pages Dashboard Depicting Different Webpages (Mogale, 2022) **78**

Figure 36: Front-end Pages Displayed in Menu Header (Mogale, 2022) **79**

Figure 37: Components of Appearance Section of Admin Dashboard (Mogale, 2022) **80**

Figure 38: Themes Dashboard Panel (Mogale, 2022) **81**

Figure 39: Customize Back-end Website Feature (Mogale, 2022) **81**

Figure 40: First Draft Iteration of Maru Odyssey (Mogale, 2021) **88**

Figure 41: Detective TenG Profile/Bio (Mogale, 2021) **89**

Figure 42: Detective Sandz Profile/Bio (Mogale, 2021) **90**

Figure 43: Deputy Chief Tandi Profile/Bio (Mogale, 2021) **90**

Figure 44: Choices Presented to User to Get Suspect to Talk (Mogale, 2022) **92**

Figure 45: Users Presented with Two Choices to Determine What Caused Feud (Mogale, 2022) **92**

Figure 46: Passage Shown for User Who Chose First Choice (Mogale, 2022) **93**

Figure 47: Passage Appears after Choice Two is Chosen by User (Mogale, 2022) **94**

Figure 48: Image of Shed Depicting Where Shooter Hid While Firing Bullets (Mogale, 2022) **95**

Figure 49: Images and Dialogue as a Central Canvas for Ren'Py Interactive Storytelling (Mogale, 2021) **100**

Figure 50: Maru Odyssey Investigation Mind Map in Boss T's Office (Mogale, 2022) **100**

Figure 51: Black Background Scene as a Precursor for Action to Follow **101**

(Mogale, 2022)

Figure 52: Flurry of Activity at MaRu Castle as Murder Investigation is Underway (Mogale, 2022) **102**

Figure 53: Image of Bullets Flying Accompanied by Sound Effect of Bullets in Ren'Py (Mogale, 2022) **103**

Figure 54: Ren'Py Interactive Experience Rendition of Choices (Mogale, 2022) **104**

Figure 55: Twine Interactive Experience Rendition of Choices (Mogale, 2022) **104**

Figure 56 (top) & Figure 57 (bottom): Horizontal Header Menu with Submenus and Webpages (Mogale, 2022) **107**

Figure 58: Twine Main Story Passage Editor Input Screen (Mogale, 2021) **112**

Figure 59: Twine's Cascading Stylesheet Editor for Styling Story Elements (Mogale, 2021) **113**

Figure 60: Ren'Py jEdit Authoring Tool on Python Scripting Language (Mogale, 2022) **114**

Figure 61: Ren'Py Game Failure to Render and Launch (Mogale, 2021) **115**

Figure 62: WordPress Page Editor Inherent to WordPress CMS (Mogale, 2021) **116**

ABSTRACT

The dawn of the internet brought about a multitude of possibilities in the realm of storytelling. This meant utilizing digital-centric platforms to create stories that would enable the end-user to interact with them on digital interfaces. In the same vein, the advent of digital platforms opened more doors for creators to find interesting and innovative ways to create stories that broke the mold and provided new avenues of interpretation and exploration. Interactive fiction is one aspect of digital storytelling that gained momentum by opening channels for interactivity. The research explores interactive fiction storytelling through the lens of computer-based software program tools Twine, Ren'Py and hosted website domain to determine how the core tenets of interactive storytelling influence the experiences of both the user and creator, and to what degree. The core tenets to be explored in the research are divided into two areas: end-user specific tenets – *Immersion, Integration, Interactivity, Impact* - and author/creator tenets – *Narrative Structure, Authoring Tools, Output Media,* and *Interface.* I derived the end-user specific tenets from digital storytelling specialist Simon Heyes who laid out the core principles of digital storytelling. I extrapolated the author/creator tenets from SeokKyoo Kim, SungHyun Moon and SangYong Han who are specialists in the area of computer-based narrative construction systems and structures. These tenets form the framework of the research. The premise of this research is adopting a creative practice approach to delve into the creative investigation of computer-based narrative construction by creating interactive fiction as a medium of digital storytelling.

Keywords:

Interactive Fiction, Digital Storytelling, End-user specific tenets, Author/Creator tenets, Creative Practice, Narrative Construction, Twine, Ren'Py, Interactive Website.

SECTION 1: INTRODUCTION

The genesis of the internet and the World Wide Web in the 1990s brought in its wake a myriad opportunities for a wider global reach. Mohammed Yamin, a professor for the Department of Management and Information Systems at King Abdulaziz University, opines that the emergence of the internet birthed ground-breaking information technologies that irrevocably altered our way of life (Yamin, 2019, p. 759).These sentiments are supported by Katarina Bashova – an expert in software development and web development programming – and Veno Pachovski, currently in the School of Computer Sciences and Information Technology at University American College Skopje. Bashova and Pachovski (2013) refer to the internet as "the new window to the world." They surmise that the technological advances in the 21st century have ushered a new way of storytelling that employ computer-centric technologies to old and familiar storytelling conventions and practices while also being emergent in paving way for stories to be interpreted on digital platforms and devices. Yamin (2019, p.759) contends that the internet database carries a whopping 1.2 million terabyte data from giant corporations Google, Facebook, Amazon and Microsoft. Not only that, but he also further postulates that the internet has an estimated four and a half billion websites. Part of this reach is allegorical to the metamorphosis of storytelling that emerged on digital platforms. According to Lang, Laing, Moules and Estefan (2019, p.1), the transition from written word outside the digital space to the digital space meant that stories could be transmitted to various parts of the world without being bound by the presence of a physical storyteller, as was prevalent in oral cultures.

Lang et al. (2019, p.2) define digital storytelling as telling and curating stories using digital technologies. Through the creation of various digital technologies, various mediums of storytelling – both fiction and non-fiction – emerged; from blogs to vlogs (the former denoting written text on website platforms, and the latter videos on website-based platforms like YouTube, Vimeo, etc.), digital book applications such as Wattpad, Fundza, Aldiko, Moon, etc., and web-based software programs like Twine. Ferns (2020) asserts that digital storytelling has its roots from other forms of storytelling such as comics, film and books. All of these platforms paved room for storytellers to use these media to share their vision with the world, hence opening up

a global digital market that was hitherto not available. Quite naturally, the metamorphosis of digital technologies created more innovative and interactive ways of storytelling.

According to Christian Roth, an author who has written publications in the area of Interactive Digital Narratives, interactive storytelling is a medium through which a narrative and its progression is influenced by the reader in real time (Roth, 2015, p. 1). Valentina Nisi (2017) gives a poignant trace for how the progression of storytelling emerged, noting that, “The trajectory of interactive storytelling followed the pace of digital technologies from hyperlinked cybertexts to transmedia mobile stories.” She further posits that digital technologies allowed for hypertext to use new ways of creative narrative in the form of non-linear and multi-branching narratives which birthed what we define as interactive storytelling. Interactive fiction storytelling is borne from this progression in the technological landscape and the Internet, and has taken a life of its own through the creation of multiple software program tools that enable stories to be told in non-linear narratives in digital spaces.

In unpacking the subsequent emergence of interactive fiction stories borne from the rapid digitalisation of technology, this research sits at the nexus of this landscape by exploring interactive fiction storytelling through the lens of computer-based narrative construction. The study will be premised on two umbrella core tenets; **end-user focused tenets** and **author/creator focused tenets**. I have coined the terms *end-user tenets* and *author/creator tenets* to denote the former as tenets that affect, impact and are devised for the end user who consumes stories, and the latter as principles that authors or creators of interactive fiction incorporate in the creative process and how said process impacts how the author/creator renders the works of interactive fiction.

The end-user tenets are derived from Simon Heyes, an award-winning digital storytelling expert and marketer of brand Novel. Heyes (2014) outlines four core tenets of digital storytelling: *Immersion, Interactivity, Integration* and *Impact*. The author/creator tenets are derived from the principles of narrative construction of storytelling systems espoused by SeokKyoo Kim, SungHyun Moon and SangYong Han - published authors of journal articles in South Korea in the area of narrative construction systems and structures. Kim, Moon and Han in their journal publication

Programming the Story: Interactive Storytelling Systems identified four key components of interactive storytelling narrative construction: *Narrative Structure, Authoring Tools, Interface* and *Output Media* (2011). These will be explored through the creative practice lens (more about this further below). The core tenets will be delved into further in Sections 2 and 4, with Section 2 providing context and foundational construction of the tenets, and Section 4 incorporating the tenets as a reflective analysis that breaks down how each set of tenets influenced the creative process, the extent and degree of the role each set plays in the process, and how that is all informed by the platforms in which stories are created.

The tenets outlined above will be informed and premised on the analysis of interactive fiction storytelling creative project *Malagwane Ruins Odyssey* – an investigative adventure multi-branching nonlinear fiction story rendered through the utilization of three computer-based program tools: ***Twine, Ren'Py*** and ***Interactive Website*** interface as a medium of storytelling. This analysis is the second part of the research – the first being the framework premised on the tenets on a theoretical level, and the second through the lens of a creative project that will breakdown how the tenets have been inculcated through the creative practice outlet.

As outlined above, four end-user core tenets of storytelling are *Immersion, Integration, Interactivity* and *Impact* (Heyes, 2014), as well as the author/creator tenets by Kim et al. (2011) *Narrative Structure, Authoring Tools, Output Media* and *Interface*. These core tenets will form the rubric of the analysis of the research. This multimodal focus on fiction will aim to explore the different ways authors/storytellers create stories and how their chosen interactive media tools garner an immersive experience for the end user or consumer. By using these core tenets, the research aims to demonstrate the nuances of interactive fiction storytelling through bringing to focus what this genre of storytelling does, the role of computer-based tools in narrative construction and the nature of impact derived from interactive storytelling.

The study is about contributing to the body of work by analysing the framework of interactive storytelling and the extent to which it provides immersive experiences for both the creator of the stories and the recipient of the stories through analysis of affordances and limitations of each platform. The research will explore works written by scholars and experts in the field of digital interactive storytelling. In particular, my

area of study will focus on interactive fiction storytelling as pertains to tools that are used to create interactive fiction and how said tools effectively incorporate the core tenets of interactive storytelling.

I am passionate about storytelling in all its various forms. With a background in publishing and writing, I wanted to explore diverse ways of telling stories outside of books and online blogs through the lens of interactive storytelling. My love for storytelling is firmly rooted from my love of reading books growing up. I remember fondly how my mother used to make sure my library cards had updated information so that I always had access to books. This love for reading sparked a deep passion for writing and storytelling. Since enrolling into the specialisation of Digital Arts, I have been fascinated by the creation process of stories through interactive computer-based tools and digital tools. The drive behind this research is to analyse how interactive storytelling delivers results through computer-based tools and how these are effectively utilised as storytelling mediums.

Initially the focal area of research was to be centred only on web-based interactive fiction storytelling, but through the process of more research into the field of interactive digital storytelling, I changed course to extend this concept to computer-based software; both web-based and downloadable software programs. The limitation of only exploring web-based programs wouldn't fully encapsulate the gist of this research which aims to demonstrate the affordances of software programs and their role in interactive fiction storytelling. I thus made the decision to extend the scope of the research to include open-source downloadable software programs that utilise the tenets of interactive fiction storytelling for creating non-linear multi-branching narratives. The media of both computer-based downloadable software programs and web-based program were chosen to clearly demonstrate the affordances the respective media have, and how stories are told through those media – user experience and their level of interaction with the interface.

Creative Practice Approach

> *"In recent years artistic practice has developed into a major focus of research activity, both as process and product, and discourse in various disciplines have*

made a strong case for its validity as a method of studying art and the practice of art." (Skains, 2018, p. 84).

Lyle Skains, a creative writing expert from the School of Creative Studies and Media in UK (at the time of publication of her article *Creative Practice as Research: Discourse on Methodology*, she was based in Bangor University), breaks down the essential components that underpin artistic practice research. Skains, who refers to artistic research as both "process and product," refers to the nature of this type of creative research which explores research from a two-fold perspective – firstly, from the exploration of a creative project authored by a scholar and/or researcher in the creative industries which forms part of the research discourse, and secondly, the reflective knowledge production process which emanates from the documentation and observation of the creative process and project.

The phenomenon of research practice is augmented by Linda Candy, author of *Research and Creative Practice*, who opines that research in the artistic professions is conducted for two reasons; to derive "conscious individual reflection" through personal effectiveness, and to provide a systematic approach/lens through which people interact with creative research from artworks/creative projects (Candy, 2011, p. 33). The assertions by Skains (2018) and Candy (2011) are in alignment with musical philosopher and Professor Emeritus Henk Borgdorff's, who has been widely published for theories in research in the arts. Borgdorff (2006) refers to creative practice within the arts as practice-led research, practice-based research or artistic research. He makes three distinctions within the field of research in the arts sector: research *on* art, research *for* art and research *through* art. He describes research *on* art as research that is underpinned by the researcher and the research object from a theoretical distance. That is, the research art is its object where the researcher has no direct connection with the research of the art/artefact they are conducting. Research for art is research can be described narrowly as applied research, in the sense that "art is not so much the object of investigation, but its objective." (Borgdorff, 2006, p. 6). Borgdorff means that research on art is the technical or procedural nature of investigation that seeks to discover the "how-tos" of the art in question. It can be equated in some sense to the instructional manual of a game that details how to build the game using a specific platform and the processes to be

followed in the construction process. Research *through* art, as Borgdorff defines it, is the artist's own practice that forms a central part of the research process and methodology. The researcher and the object of research are intertwine and integral to the investigation of the research.

Drawing from Borgdorff's definition and extrapolating from Skains' take on artistic research discourse, this research is premised on the research *through* arts direction and the creative practice will form a substantial part of this research. Teasing apart Borgdorff's concept of research *through* art as an applicable research methodology for this project, this will be even more evident in Section 3 where the project components will be broken down according to three platforms **Twine, Ren'Py** and **Interactive Website**, and Section 4 which will be a reflective analysis of the interactive fiction creative practice project and how it is used for knowledge production, supported by theoretical frameworks and postulations from Section 2 of this research. Having said that, this research also falls into Borgdorff's taxonomy of research *for* art, because the creative practice process to be outlined in Section 3 involves some technical elements of each platform that indicate how each of the three platforms are used for *Malagwane Ruins Odyssey*. The stories I've rendered on these platforms then become the instrument of my research process that can be a basis to educate someone else on how to work on these three platforms through the procedures I've outlined in Section 3 of the creative process.

The nature of the creative practice will take on two key components – the structural makeup of each platform as pertains to affordances and limitations, and a reflective account of all three platforms that will detail accounts of the overall process. At the backbone of this process is the framework of both the end-user tenets and the author/creator tenets which will solidify the analysis and provide some insights into how interactive creative storytelling is influenced by various factors such as the type of platform used to create the story, the components that inform the immersive experience for the user who consumes the stories, and the composite elements that make the sum of the parts for the narrative construction process for the author/creator who embarks on creating interactive fiction stories.

The choice of three platforms instead of one or two is to ascertain in detail how three different platforms offering different interfaces influence the output type of stories. For instance, Ren'Py is a visual novel that incorporates images, dialogue and sound effects (Renpy.org, n.d). Twine, on the other hand, while also a tool for interactive fiction storytelling is not a visual novel but places more emphasis on threads and highlighted hypertext that links one word/phrase to the next part of the story. Twine is essentially an interactive fiction tool for creating nonlinear stories which are published in HTML format (Twinery, n.d.). What distinguishes Twine from a website is that a website is a collection of several webpages that collectively form a website. A website is hosted under a single domain (Techopedia, Updated 2020). The similarities between Twine and a hosted website platform is that both Twine and website platforms publish output as HTML format.

The next component below will give a brief background synopsis of each platform to be incorporated as part of the creative practice process and a better understanding of what each platform encompasses. Sections 3 and 4 will get into even more detail, where the structure, affordances and limitations of each platform will be explored, underpinned by the two sets of core tenets and how these tenets play a role in interactive fiction storytelling through the lens of narrative construction, and the degree to which each of the tenets influence interactive storytelling based on the platform used.

Twine

Twine is an interactive fiction tool for creating nonlinear stories which are published in HTML format (Twinery, n.d.). Twine was created by Chris Klimas and was initially released in 2009 (Engström, 2019). It is an open-source Interactive Digital Narrative (IDN) tool that is used to create non-linear branching narratives comprising of connected passages using hypertext links to link from one part of the narrative to the next (Engström, 2019). Twine utilises a combination of text infused with code to create stories. The breakdown of how Twine is utilised will be discussed further in the research as the scope of Twine is analysed from both a structural perspective and from the perspective of the core tenets and how these are realised through this platform.

Ren'Py

Ren'Py is a visual novel that incorporates images, dialogue and sound effects to tell interactive stories (Renpy.org, n.d). The genesis of visual novels can be traced back in the 1980s from Japan where a game called *The Portopia Serial Murder Case* was published by the company Enix. It was later adapted for the Nintendo Entertainment System. From thereon, the evolution of the visual novel morphed into what it is today, with platforms such as Ren'Py embodying visual novels in their framework (Bashova & Pachovski, 2013, p. 3). Ren'Py is a computer-mediated software that has an easy-to-learn script language that can be used to author visual novels and creation of games – more of this will be explored in Sections 3 and 4, which will provide a detailed synthesis of the platform through the creative process.

Ren'Py utilises certain programming logic and techniques to prompt the creativity of games and visual novels. The creative practice section will analyse the production process of Ren'Py through the lens of its affordances and constraints and how these speak to the core tenets as outlined in previous sections.

Website

A website is a collection of several webpages that collectively form a website. A website is hosted under a single domain (Techopedia, Updated 2020). A website, using various program creation tools and Content Management System (CMS) platforms such as WordPress, Drupal, Joomla and Site Builder, enable the creator to incorporate a mixture of pre-made templates and some coding knowledge to create websites that range from static to interactive. The more complex the website, the more coding knowledge is required. The creative practice component of this research will analyse this and reflect on the process of creating an interactive fiction piece on the website interface and explain the processes as pertains to affordances, constraints and any other important delineators pertinent to the platform that encapsulate the website as a platform for digital interactive storytelling.

The three platforms above will be explored further in detail in Sections 3 and 4 and will give more insights into how they work as interactive storytelling mediums for both the user who consumes the stories made from such platforms, and from the author who embarks on the journey to create interactive stories on said platforms.

The next section below, which concludes this section, provides a synopsis of the areas where interactive stories can be/are incorporated. This provides a birds-eye view of digital interactive storytelling and how it has been co-opted over the years since its inception in various industries and areas of expertise. The purpose of highlighting this is to draw attention to the fact that even though I am only exploring one area of digital interactive storytelling, other areas of interest where interactive stories are used are important to know. Some of the areas highlighted below could also be an area of interest for someone else who comes across this research.

Areas where Digital Interactive Storytelling (DIS) is being used

Digital Interactive Storytelling has been adopted by numerous entities, from educational institutions – primary, secondary and tertiary institutions – to the media and journalism industry. Interactive storytelling in the digital media is used in a variety of settings, from the academic space for pedagogical reasons, to the arena of journalism which depicts accounts of day-to-day news and other short and long-form content. The premise of this section is highlighting how interactive storytelling has been adopted by different entities and is applied in different ways using the core principles of interactive storytelling (as outlined in sections above).

One of the platforms of exploration for my creative project is the website domain platform. This platform, within the ambit of interactive storytelling, has given journalists many ways of portraying stories besides written text. News stories can be consumed by users using various media like videos, audios, image slides. The key lies in how users interact with the stories by the choices/options provided. This very platform has also given academic institutions room to create lesson plans for their students through interactive modes of creation. Below is an exploration of the influence of Digital Interactive Storytelling in the academic and journalism industries.

Learning and Academic Spaces

John F Barber, a lecturer in the Creative Media & Digital Culture Program at Washington State University Vancouver, is a published author who provides insights into the opportunities in the area of pedagogy. Barber (2016, p.1) offers a powerful insight about the convergence of digital interactive storytelling with pedagogy in the humanities field. He makes a cogent argument about the delineation of digital storytelling as a hitherto separate area that was previously not explored by humanities scholars who are known for working alone, independently and utilising physical objects and "following established theoretical guidelines." He offers insights into the powerful convergence of digital mediums with pedagogy as a way to "help engage academic research with creative practice to promote critical thinking, communication, digital literacy, and civic engagement."

At the root of the drive towards engaging with interactive stories as a means of knowledge production, is the compelling impact of computer-based technologies as mediums for digital storytelling that has paved ways for easier curation and distribution of stories through online channels, even if stories were built using software program applications offline. The academic and educational spaces have seen the advantages of using digital mediums to tell powerful stories.

Interactive Journalism

Interactive journalism within the realm of the digital space has been gaining solid ground. The infinite landscape that the world wide web has offered means that every industry has had to make adaptations for seamless digital experiences with their brands. The media industry too, has had to jump the bandwagon to interactive digital journalism. Part of the reason the media industry had to adapt to digital journalism was the decline of print media demand in the form of newspapers and magazines. This print media decline brought new and innovative ways to repurpose their brands within the digital landscape (Cox, 2018).

The exponential growth of digital technologies paved a way for interactive journalism as a medium of telling non-fiction accounts of both day-to-day news and other forms

of short and long-form stories and accounts. *“A spectacular example of the potential of digital-age storytelling, the web site combines thorough traditional reporting of a deadly avalanche with stunning topographic video.”* [Snowfall, as described by Peabody Award] (Cox, 2018). Snowball is an interactive multimedia story about an avalanche at Tunnel Creek told by John Branch and featured in the New York Times in 2012. Stories like these and others paved a way for journalists to use multimedia modes like videos, audios, text and images combined to tell compelling stories.

In South Africa, news websites like News24, The Daily Maverick and Mail & Guardian have embedded audio for readers who would prefer listening to articles as opposed to reading them. Videos are another popular form of multimedia in journalism that are used in conjunction with text-based reporting.

Interactive Web Comics

Batinić (2016), who wrote a journal article about enhanced web comics in the digital space in his article *“Enhanced Webcomics”: An Exploration of a Hybrid Form of Comics on the Digital Medium*, makes a poignant point about the evolution of comics after finding a platform on computer screens to web comics. What is especially unique about webcomics is that “once comic artists start to exploit the virtual advantages of the computer; they will be free from the layout constraints of the printed page.” (Batinić, 2016)

One such artist who took advantage of the web comic medium, as posited by Batinić (2016) above, is Matt Huynh. Huynh, a renowned Vietnamese-Australian visual artist, adapted the popularised and highly acclaimed graphic comic novel *The Boat*. *The Boat* is an interactive graphic novel that depicts the horrors and subsequent escape after Vietnam Wars, as written and told by Nam Le (Huynh, n.d.). It was produced by SBS and made into a web comic that incorporates different multimedia such as audio and sound effects like heavy rain downpours, written text, as well as comics.

Mobile and Web Book Applications (Apps)

Since the introduction of e-books and e-readers like Kindle, the digital realm of writing stories has changed the trajectory of publishing and made it accessible to authors who could not afford the route of traditional publishing. Traditional publishing was turned on its head when new digital mediums of witing and telling stories came to the fore. Chief among such mediums is the popularisation of mobile book applications. One such application that has gained momentum since its inception is Wattpad. "The popularity of social writing platform Wattpad is a recent example of how a new generation of influential and innovative writers is entering the publishing arena." (Bold, 2016). The era of social publishing on digital platforms meant that digital technologies could be used to harness a different user experience (UX) through the utilisation of interactivity in stories. In Wattpad specifically, as has been my experience, authors can interact directly with their followers who make comments about the story and could very well influence the outcome of the story. Interactive mediums such as text, audio and video are inserted in pages to enhance text-based stories.

What is compelling about Wattpad specifically is how it has given birth to authors who had started off the platform publishing their story chapters for free and ended up being published authors picked up by traditional publishing houses. Lilian Carmine found success in Wattpad when she started authoring romantic stories and racked up an impressive 37 million readership. She was subsequently published by Penguin Random House (Matharu, 2017).

The section above highlighted areas and industries where interactive storytelling is incorporated. This was to provide a birds-eye view of some of the sectors which have taken the baton of interactive storytelling and inculcated it into their lexicon and modus operandi as part of their knowledge production system or information output medium.

Section 1 above put a microscopic lens into the premise of interactive storytelling in the digital landscape. An introduction that sought to highlight the progression of

technological developments over the years since the wide scale adoption of the Internet in the 90s, which then birthed interactive fiction mediums of storytelling. The section then outlined the grounding of this research which is underpinned by two sets of tenets – end-user focused tenets and author/creator tenets – through the lens of computer-based narrative construction tools. The narrative tools to be explored in Sections 3 of this research will be through the creative process of three platforms – Twine, Ren'Py and Interactive Website. Through the creative process, each platform will be broken down into three components; structure, affordances and limitations. Section 4 of this research will then reflect on the core tenets in detail for each platform and shine a light on the prioritisation of these tenets in each platform and how each tenet plays a role based on the platform used.

The next section - Section 2 - will provide a theoretical framework of the two sets of core tenets – end-user and author/creator tenets – and provide grounding for the tenets with more detail. This is grounding that will be referenced in subsequent sections where the creative practice project will be broken down according to the three platforms and how the components explored tie in with the tenets for each and how said tenets are prioritised.

SECTION 2: THE TENETS OF INTERACTIVE STORYTELLING

This section provides the grounding and theoretical framework upon which the core tenets are premised. As discussed in the previous section, the two sets of tenets are; End-user tenets and author/creator tenets. These tenets address and analyse different aspects of interactive storytelling. The end-user tenets address the experiences of the consumer of content made by others, and the author/creator tenets address the principles that determine the creative process and the subsequent influence and impact of these grounding principles that create narratives based on premises such as type of medium, narrative configurations, scripting language, and output media.

Before delving into the end-user tenets and the author/creator tenets in the latter parts of this section, the section will lay the foundation for hypertext history, the world wide web, and how both of these integral elements resulted in digital storytelling. To that end, the ethos of digital storytelling and the concepts underpinned by this type of storytelling system.

2.1 Dotting the I's and Crossing the T's of Interactive Media and Digital Storytelling

Kim, Moon and Han (2011, p.221) define digital storytelling as, "Storytelling that is done by applying digital technology in the medial environment or as an expressive means." What Kim et al (2011) are referring to by using the term "expressive means" is in both the creative process and the functionality of the media through which the story is told. Key to this is how the creator expresses the story by utilising tools available at their disposal in providing a story that maximises the output of the media used.

Within the ambit of digital storytelling is interactive storytelling. This mode of storytelling comprises various media incorporated into the iteration of a story with the utilisation of emotional responses that determine the decisions taken by a user who propels the trajectory of the story. That is, interactive storytelling propels the user to influence how the story plays out by making certain decisions using available options

determined by the media used, story narrative elements, and interface of platform used. Kim et al. (2011, p.221) give an example of edutainment videogames that they posit to produce different outcomes depending on the deliberate action of the user, without whom there would be no interactivity. Games, particularly, exemplify this, as can be seen in various game types such as visual novels, Role Playing Games (RPG) and adventure games (Kim et al., 2011, p.221).

Interactive storytelling, more than other types of storytelling, employs the concept of Ergodic Literature, coined by author Espen Aarseth in the book *Cybertext: Perspectives on Ergodic Literature*. Aarseth defines Ergodic Literature as text that requires non-trivial active participation from the reader/player (Aarseth, 1997). “Non-trivial” can be deducted to mean actions that significantly influence the direction or trajectory of the story and are therefore integral and crucial to the configuration of the narrative. A physical book cannot be described as ergodic literature since all it does is require the reader to read the words on paper with no greater agency or action to influence the narrative; there is a lesser degree of agency required to influence the trajectory of the narrative. Where ergodic literature is especially applicable is interactive *hypertext-derived* fiction work where a great deal of agency is employed to influence the trajectory of the narrative.

It is crucial to underscore that the type of text that inculcates ergodic literature is hypertext that is generated from the cyber environment that is computer-generated and programmed. Aarseth (1997) highlights the role of cybertexts and how they have influenced the arc of interactive storytelling. He highlights two key aspects of cybertext; the mechanical composition of the text as relates to the medium from which they are viewed, and the reader/user who is an “integrated figure” and plays a bigger role than a passive role. The mechanical organisation of the text, he posits, is integral to the intricacies of the medium in which they are portrayed. The medium from which the cybertext is derived then plays a role in how the user, the “integrated figure” influences the narrative of the story. The user in the cyber environment is given a greater deal of agency. The concept of agency will be explored further in this section under end-user tenets.

Before getting into the tenets, which ground the framework and premise of this research, a history of the worldwide web and hypertext is important to highlight.

A History of the Hypertext and the World Wide Web

There would be no digital interactive storytelling without the internet, and consequently there would be no hypertext language mark-up languages without the internet. To understand the impact of hypertext media and its usage in the web and in modern day computer programming, it is necessary to give a history of the inception of the world wide web. In understanding the evolution of the World Wide Web, it is imperative to dive into the history of hypertext, what it means and how it influenced the subsequent invention of the World Wide Web (W3).

The development of the W3 started with Tim-Bernes Lee, a British Scientist, who at the time worked for CERN. He developed a proposal in March 1989 detailing how Internet-based hypertext could be the solution to the development of the World Wide Web, also known as the W3. The intention of this proposal was to describe how hypertext documents could be viewed through browsers to generate wider access for different people across different countries (CERN, 2018). The world wide web is essentially a platform that is used to view and access data via website browsers such as Google Chrome, Mozilla Firefox, Safari, Microsoft Edge. How do hypertexts come into the equation? Hypertext, in simple terms, is text links which use code to link from one site to another or part of a site to another part (Shenron, 2010). It can be deemed as a “connector” of sorts that connects different parts of elements to other elements to form a coherent network of information; be it in the context of story texts that link different parts of text, or from commercial websites which link different pages of website merchandise to other parts of the site to purchase links, etc. I will discuss website pages and the role they play in the next section (Section 3) through my creative project *Malagwane Ruins Odyssey* as one of the three platforms that form the basis of this creative research practice. This is where the evidence of hypertext will be seen through links for the story connecting one chapter of the story to the next chapter, and parts of a chapter through choice links.

In unpacking hypertext, it is imperative to bring in Mark Bernstein - hypertext media expert and author of *Patterns of Hypertext* and co-author of several hypertext-centric journals and books. Bernstein coined the term *Hypertext Rhetoric*. He defines this as “the study of effective expression in interlinked media.” (Bernstein, 1999, p. 1). To

unpack the term *Hypertext Rhetoric*, he discusses how the first studies into the subject area of hypertext writing unearthed an understanding that hypertext was predicated on how links facilitated access through their utility and how this process of engaging with links resulted in “free and knowing navigation” that emboldened the user/reader. The concept of “effective expression” can be aligned with Aarseth’s notion of Ergodic Literature which iterates that interactivity is non-trivial, impactful and meaningful. Bernstein’s “effective expression” lays the groundwork for interactive storytelling that is framed on telling stories which afford the user/reader/player a great deal of agency and immersion to elicit emotive affect.

The Role of Hypertext in Digital Interactive Storytelling

The emergence of work in hypertext heralded a new way of telling stories and of creating narratives and the subsequent experiences of said narratives (Nisi, 2017). Nisi (2017) further states how pioneering work done in the hypertext space birthed multi-branching and multimedia narratives, in effect, more nuanced digital narratives that traditional media could not provide.

“With the explosive growth of the world wide web in the late 90’s, storytelling on the internet flourished and with it the online distribution of multimedia rich hypertext.” (Nisi, 2017, p. 45). Making deductions from Nisi’s statement, it is evident that the emergence of hypertext and multimedia catapulted the digital revolution that has made storytelling more compelling by utilising different digital tools and channels, all propelled by the inception of hypertext media. Mark Bernstein explains that hypertext has the intention of achieving what could not be achieved on print (Bernstein, 2009). What Bernstein is referring to is the potential of hypertext vis-à-vis adding a different layered approach to storytelling which utilises a digital-centric approach to tell stories that involve direct interaction of the reader/player/consumer with the storyworld. A pertinent component of hypertext is how it gives the user choices and links to navigate text. For instance, one can click through an image that has been linked and they are taken to a different page of the medium they are using. In this respect, the link has served the purpose of taking the user to a different navigation panel of the medium of choice – website, digital books, etc. “By choosing some links and not others, the reader may experience the text in different sequences. A specific

trajectory through a hypertext is a reading. The sequence in which events are presented in a specific reading is a plot." (Bernstein, 2009). I will discuss this concept by Bernstein in Section 3 by unpacking the creative practice processes for Twine, Ren'Py and Interactive Website. Through this breakdown it will become clear how these three platforms provide the reader with a different experience based on their individual platform configuration elements and how these render the end result to the reader/player.

What Bernstein is alluding to is how choosing a particular link and not another, the user by virtue of having made a certain choice experiences the patterns of a story differently than another user who chooses a different link within the same story. Twine is a perfect example of this. The author presents the user with different links to click. The choice made by the user determines the sequence in which they experience the story. If there are three choices given by the creator in a plot and the user clicks on the second choice, the trajectory of their experience will be different than another user who makes a different choice. Bernstein (2009, pg. 5) further mentions how hypertext is non-sequential and challenges the premise of a narrative which follows a sequence. This is to say that interactive fiction provides a nonlinearity to storytelling and consequently opens up more possibilities into how the story unfolds, as determined by both the actions of the creator in putting in place the various interactive elements, and the user in how they interact with the story as determined by the choices they make. As the author of my project *Malagwane Ruins Odyssey* which I have rendered on three platforms – Twine, Ren'Py and Interactive Website – the platforms will demonstrate the nonlinearity of interactive fiction storytelling through the end-user tenets (in how the user interacts with the story and the subsequent choices they make to move the story forward) and author/creator tenets (in how I as the author will curate interactive elements in the project using the script languages of the platforms).

2.2 Theoretical Framework

The core analysis of this research is situated within the frameworks of Heyes (2014) and Kim, Moon and Han (2011) core tenets. The theoretical framework focuses on

two elements of the core tenets; End-user tenets and Author/Creator tenets (Heyes and Kim et al. framework, respectively). Key to this is the exploration of the creation and effectiveness of program tools by using the rubric of the core tenets – from both end-user and author or creator perspective.

The objective of the research is to create an interactive fiction short story that will be replicated on Twine, Ren'Py and website platforms. Heyes' core tenets *Immersion, Integration, Interactivity* and *Impact* will be analysed from the end user lens to explore how they influence the story across all three platforms. Some questions that the research should answer are:

- To what degree are these end-user tenets applied in each program?
- How do the tenets impact the overall experience of the end-user in each program?

The first question seeks to delve into the intricacies of how each end-user tenet is applicable in each platform and the degree of that applicability. The degree of the applicability in each platform speaks to the prioritisation of particular tenets to a larger or lesser degree, depending on the platform and its structural configuration and how this thereby influences the tenets that play out for the user. For instance, I will be analysing whether Immersion as a tenet is prioritised more in Twine, Ren'Py or Interactive Website, and the reason(s) behind this.

The latter question will be analysing how the overall experience of the story impacts the user. In many ways the interplay between how the tenets are prioritised and the overall experience of the user play a role. This relationship will be explored further through Section 4 which is the reflective process that breaks down how each tenet plays a role in each platform and how it influences the way *Malagwane Ruins Odyssey* is presented.

The author/creator core tenets *Narrative Structure, Authoring Tools, Output Media* and *Interface*, as outlined by Kim et al., are the second arm/branch of the framework of this research that will analyse how I, as the author, create my story *Malagwane Ruins Odyssey* by taking these tenets into account and how they influence my creative process. I will seek to answer the following questions I have devised:

- How does the narrative structure influence the creation process of the interactive short story on all three platforms?
- What role do the authoring tools used in Twine, Ren'Py and website play in the creative process and final product?
- What impact does the output media type have in the experience of the author/creator creative process, combined with the end-user experience when they interact with medium?
- How does the interface of all three programs influence both the author and the end user in how they consume content?

Figure 1 below shows a diagrammatic illustration of the tenet divisions.

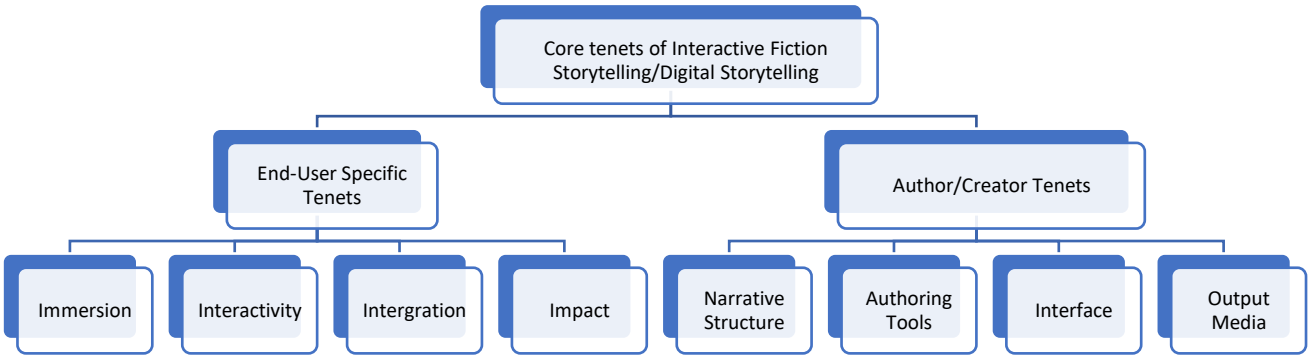


Figure 1: Interactive Fiction and Digital Storytelling Core Tenets (Mogale, 2021)

Figure 1 above is a diagrammatic illustration that summarises the core of this research, which is divided into two core elements; the end-user specific tenets based on Heyes' core principles of digital interactive storytelling, and the author/creator tenets based on the systematic side of creating projects by Kim et al. I have taken these otherwise separate principles and combined them to form the core of this research. My purpose in combing them is to highlight the role these principles play for both the author who creates the story and the reader who experiences the end product of the story. I will use my story *Malagwane Ruins Odyssey* to demonstrate

how both sets of core tenets are applied and how they impact interactive storytelling through the platforms chosen.

2.3 End-user Tenets of Interactive Storytelling

Simon Heyes (2014), a digital storytelling founder and marketer of brand Novel, extols the virtues of storytelling through the utilisation of tenets from which all stories are grounded.

The four key end-user tenets of interactive storytelling (as introduced in aim statement) that form a major part of this research are as follows:

- Immersion
- Interactivity
- Integration
- Impact

Dubbed the 4 I's of Digital Storytelling, these core tenets of interactive fiction are a metric for what forms the basis of interactive storytelling. I will be breaking down the above-mentioned tenets below.

Immersion

Digital Media, researcher and author of book *Inventing The Medium*, Janet Murray defines Immersion as "an experience of the **interactor**, a sense of being contained within a space or state of mind that is separate from ordinary experience, more focused and absorbing, and requiring different assumptions and actions (like swimming when immersed in water)." (Murray, 2011). This definition is echoed by Boston and Marsh who discuss immersion as "perceptual illusion of non-mediation." (Bostan & Marsh, 2012, p. 25). They opine the immersive experience that blurs the lines of reality outside of the virtual computer-based narrative constructed medial environment. It provides the user with a dive-in approach that shifts the attention to an immersive virtual environment which fosters an environment where the

player/user can “forget” about their reality and immerse themselves in an interactive environment where they take part in the narrative trajectory of a particular medium.

Immersive storytelling is about giving the player/user the feeling of being part of the story and being ‘present’ within the story. Immersion in interactive storytelling is used to evoke emotive experiences in different areas of storytelling; games, journalism, theatre, etc. (Arrow, 2016). Heyes (2014) delves into the immersion of storytelling by asking poignant questions such as, “How deep does the story go? Can people veer off the beaten path? Do the characters have a back story?” These questions contribute to the degree of immersion vis-à-vis the narrative elements of the story. How deep the story goes depends on how much depth the author employs when authoring the story. Does the author provide a deep dive into the storyworld? This can have many layers to it, depending on the complexity of the storyworld. A simple storyworld with only one or two main locations in the story will have a different immersive experience than a storyworld which has sub-storyworlds built into it with many locations.

Another element that influences immersion is the landscape of the characters. In a given storyworld, how the characters are depicted influences the immersive experience of the reader. Does the character have a backstory? Characters who have a backstory give the reader a level of relatability with the character who may have a story that is similar to the experiences of the reader. That provides an additional layer to the immersion because the reader can relate to the character a bit more – either to a story they themselves have lived or through someone they know in their lives for whom the character is relatable. Heyes’ (2014) depiction of immersion is about the ability of a story to engage the user by offering users multiple experiences through choice, agency and interactivity. Immersion is about the worldbuilding of a story. Some factors that influence this are how well the worldbuilding is described, and the pervading theme of the world in the story. These will influence how users/players interact with the story.

A crucial component of the immersive experience is the role of the user in how they absorb and perceive the game story in which they are participating. This is denoted

by Roth and Koenitz (2016) as dimensions of the user experience. They have illustrated these dimensions in diagrammatic format, as seen below:

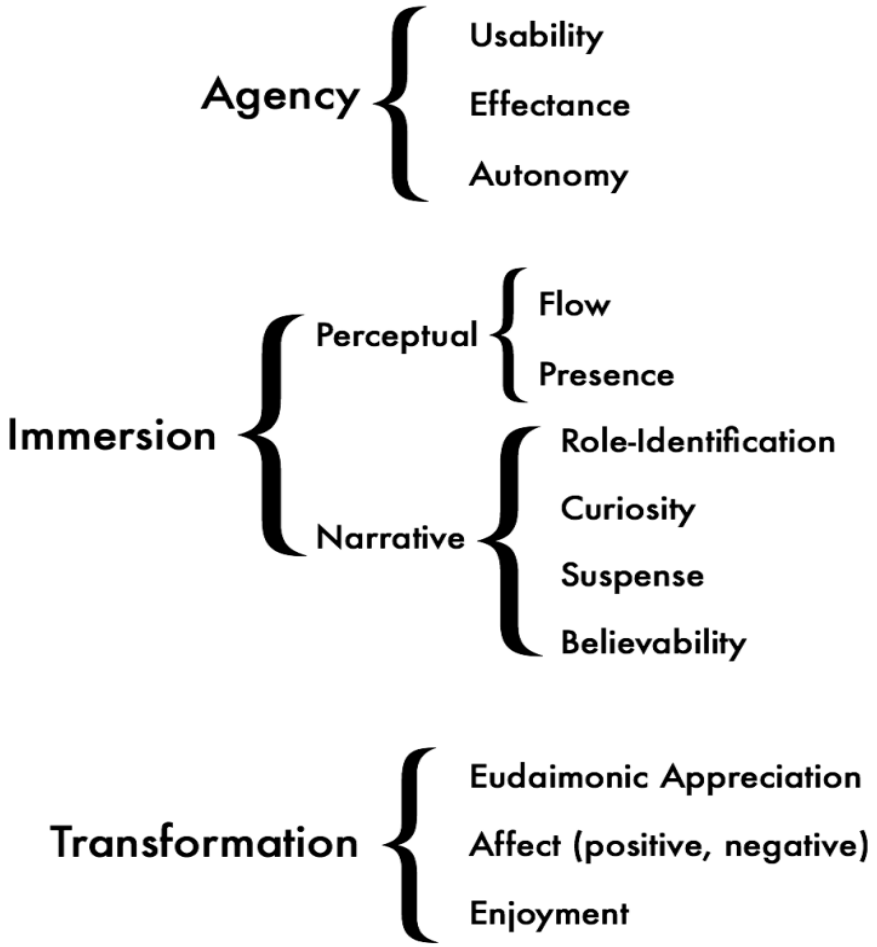


Figure 2: Dimensions of User Experience (Roth & Koenitz, 2016)

Before delving into the intricacies of Figure 2 above, I would like to highlight Stacey Mason's take on immersion. She breaks down immersion into two types of immersion: *Narrative Immersion* and *Mechanical Immersion*. She defines narrative immersion as "transporting one's consciousness to a story or events", and mechanical immersion as they type of immersion where the player is influenced by the game system's mechanics, constraints of the system and its constructive elements (Mason, 2013, p. 26). Narrative immersion aligns with Murray's definition of being transported to an elaborated simulated place. In my story *Malagwane Ruins Odyssey*, both of these kinds of immersion are portrayed, with narrative immersion highlighting the impact the player gets from navigating my storyworld and

mechanical immersion that is influenced by the configuration of the platforms – the breakdown of these platforms will be analysed in depth in Sections 3 and 4.

In breaking down the different types of immersion, Mason also touches on the choices that influence the immersive experience of the reader. She examines two choices: *Diegetic choices* – choices that a player makes as a character or as a present entity within the story world to affect the narrative trajectory of the story in the storyworld, and *Extra-diegetic choices* – choices that a reader makes as an observer removed from the game/hypertext fiction story (Mason, 2013, p. 26). How these choices affect the reader/player's consciousness differs depending on what choices the player is presented with, as these are projected into the immersive experience.

In the interest of the scope of the research, the components Roth and Koenitz (2016) depict in their *Dimensions of User Experience* image, as seen in Figure 2 above, will be discussed briefly. They make a distinction between three categories: Agency, Immersion, and Transformation. Agency, as has been previously defined, according to Murray, is the satisfying power of taking meaningful action and seeing the power and impact of those actions. Under Agency, Roth and Koenitz highlight three elements; Usability, Effectance and Autonomy. They define usability from the reference point of a system which is the interface design of a particular system program. In the context of my story *Malagwane Ruins Odyssey*, usability can be gleaned from the lens of the usability of Twine, Ren'Py and Interactive Website and how the design of these systems differ from one program to the next. Effectance is predicated on how a certain action taken within a dramatic storyline influences the progression of the narrative. Autonomy, Roth and Koenitz posit, is underpinned by the theory of Self-Determination which is characterised by the intrinsic motivation being the key driver in human actions and motivation. To that end, autonomy is therefore the human desire to have choices and exercise will and determination in making choices driven by our motivations.

Roth and Koenitz (2016) break down Immersion under two umbrella categories of Perceptual and Narrative immersion. Perceptual immersion involves two key elements of flow and presence. Flow is defined as being completely engrossed in a storyworld without breaking concentration from the worldbuilding and simulated story

environment, and engaging with the mediated environment. This is accompanied by its cousin presence, which is defined as being absorbed and transported into the simulated world in a mindful way that speaks of the “now” that is engaged with the contents of the storyworld. Narrative immersion is about the immersive components of the dramatic storyline that the user is engaged in. It is divided into four components: Role-identification, Curiosity, Suspense, and Believability. Role-identification is about the user “identifying with a virtual character” and being in the shoes of the virtual characters. These can either be explicitly or implicitly outlined through the roles portrayed in the storyline and how they are delineated in the storyline. In my story *Malagwane Ruins Odyssey*, users can choose to identify with any of the three main characters Detective TenG, Detective Sandz or Deputy Chief Tandi and their backstories. Curiosity implies creating an environment in the storyworld that sustains the interest of the user so that they are not bored and are rather actively engaged in the storyworld. Suspense adds a layer to immersion that is closely related to curiosity. Where curiosity keeps the user engaged, suspense deals with the emotional turbulence of the user when navigating the storyworld by evoking a litany of emotions such as empathy, sadness, excitement, by creating the storyline in a way that makes the user to have emotional affect with the characters and worldbuilding. Believability is predominantly about the suspense of belief that enables users to suspend their preconceived notions and engage with a storyworld devoid of what their reality is. In interactive storytelling, Roth and Koenitz (2016) add an element to believability that speaks to how the user is involved in creating believability through their active participation in the narrative progression.

The final component of Figure 2 above is Transformation. Roth and Koenitz opine the power of transformation in how it has the power to change who we are and open our minds and hearts in ways hitherto unanticipated. There are three layers to transformation, as depicted by Roth and Koenitz in Figure 2: Eudaimonic Appreciation, Positive and Negative Affect, and Enjoyment. Eudaimonic Appreciation speaks to the visual and auditory presentation of a narrative. The aesthetics of the storyworld play a huge role in hooking in the reader/player/user to the dramatic storyline. These aesthetics can be influenced by design and the role it plays in how the user engages with the aesthetics. Positive and Negative affect is about the power of evoking strong emotions in the reader, such as positive emotions like

happiness, excitement, and negative emotions like sadness. The central point of affect is in the overarching role it plays in experiencing stories. Negative emotions like sadness do not detract from the overarching experience in being part of a storyworld that engages them and they learn something from it. Enjoyment as the last subcategory is derived from the overall experience the user has with engaging with the story in a way that gives them a general takeaway from the story that influences their feelings about it, usually positive feelings, even when there is negative affect in parts of the narrative.

As a core tenet of interactive storytelling (end-user tenet), immersion will demonstrate how it plays a role in three different software platforms – Twine, Ren'Py and interactive website through my story *Malagwane Ruins Odyssey* written for these respective platforms – as pertains to its applicability in these respective software tools.

Interactivity

According to Heyes (2014), "Storytelling, which is interactive, and puts the user in the story, is a very powerful method of engagement. It's more personal. More interesting to them." What Heyes is examining is the ethos of interactivity and how it lies in the user being able to be part of the story by influencing its trajectory through making certain choices that change the outcome of the narrative. Putting the user in the story and providing the user with mechanisms to move the story forward brings to attention the relationship between interactivity and agency. To espouse Heyes' assertion about the gist of interactivity, the principle of interactivity is about giving the user agency as they navigate the story experience by making choices that influence the narrative. Central to this is the control this gives the user instead of being a passive observer/participant to the story, as how watching a movie in a cinema would be or reading a paperback book. To elaborate further, I would like to zone in on Mason's assertion about the relationship between agency and immersion, which she says is an interdependent relationship which works symbiotically to produce a powerful narrative (Mason, 2013, p. 26). Where she highlights this as a two-way relationship, I would like to challenge this to add that it should be viewed through the lens of a three-way interdependent relationship between interactivity, agency and

immersion. These three elements are important in the makeup of interactive storytelling. Influencing the trajectory of a story through employing interactivity gives the user the satisfying power to take actions that make an impact as a result of their participation in the unfolding of the story. They are thus immersed in the storyworld, adding a different layer to how they are immersed in the world in which they are participating.

Murray (2011) expands on this by breaking down interactivity into three key elements; procedural, participatory properties of a specific digital medium, and the accompanying aesthetic pleasure derived from agency that the interactor participates in and performs certain actions with. To that end, Murray (2011) defines agency as "an aesthetic pleasure characteristic of digital environments, which results from the well-formed exploitation of the procedural and participatory properties." By "procedural and participatory properties" Murray is representing the specific digital mediums and how their design and functionality influence the level of agency, and as such, aesthetic pleasure derived from the medium. The design of the medium is influenced by different factors such as the interface elements of a particular medium, and the systematic configuration aspect of the medium which is influenced by the programming language of that particular medium. The design and functionality of Twine, Ren'Py and Interactive Website influence the medium differently. These will be explored further in Sections 3 and 4: Section 3 will provide the creative process through these mediums, and Section 4 will provide a reflective process of the core tenets and how they are influenced by the mediums.

Barbaros Bostan – a professor of Game Design at University of Turkey – and Tim Marsh – multi-published researcher with a focus on interactive narrative and design (2012) adopt three levels of interactivity: user-to-user, user-to-content, and user-to-system. User-to-user involves interpersonal interaction between people. User-to-content involves the interaction between the user and documents. User-to-system involves the interaction between the user and the computer systems. Our primary interest for this research is user-to-system interaction, i.e., computer mediated system interaction with the user. Bostan and Marsh (2012) refer to user-to-system interactivity as Human-Computer Interaction (HCI). They further break down four levels of user-to-system interactivity to:

- Computer-based interaction
- Human-based interaction
- Adaptive interaction
- Flow

The above-mentioned levels of user-to-system for interactivity take into account the interface through which they are displayed, viewed and enjoyed. In gaming environments and interactive storytelling, even though by its very nature interactivity is premised upon the technology and medium through which it is utilized, it is imperative to note that it is a product of communication through computer mediated processes and the actions undertaken by the player/user (Bostan & Marsh, 2012).

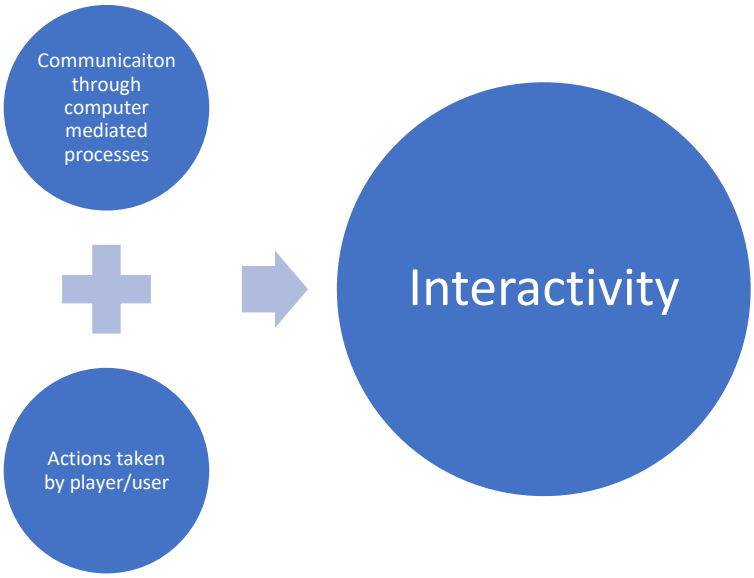


Figure 3: Interactivity as a Product of Computer Mediated Processes and Player/User Actions in Gaming Environments (Mogale, 2022)

Figure 3 above shows a simplistic diagram I created, derived from Bostan & Marsh's concept of user-to-system interaction to underscore the premise of interactivity through this lens. The premise of Figure 3 is that when you combine the communication process of computer systems through computer-generated scripting and programming language through hyperlinks (see the first part of this section) with the power of agency designed for the user to take meaningful action, this results in

an interactive experience that involves the user in the meaning-making of the interactive fiction story.

The ambit of interactivity for the user extends to more than just the agency that is afforded by the system configurative input devices. The scope of interactivity inculcates the cognitive processes the end user undergoes or experiences during their session with the game, interactive fiction story or other digital storytelling medium. A key component of this that is highlighted by Sellers (In Bostan & Marsh, 2012) is the concept of *perceptual and physical interactivity* that incorporates the player/user's response to physical stimuli generated through the game or interactive fiction constructed story. Some stimuli that users respond to include sound effects such as gunshots, door knock, etc., images, bright colours, and links that highlight actions that need to be taken. This affords the user a deeper immersive experience that results in an emotional connection that impacts the user. In a sense, the four user core tenets are connected. A cleverly curated digital interactive story game has the pleasurable result of maximising on the tenets and curating an experience for the user that will be impactful and unforgettable. This will be demonstrated further in *Malagwane Ruins Odyssey* in the next sections (3 and 4) where visual and auditory elements have been inculcated in the story elements through the platforms Twine, Ren'Py and Interactive Website, which form the premise of this creative practice-based research, and how the incorporation of these elements contributes to the overarching core tenets and how they are prioritised in each medium.

Boston and Marsh (2012) note the importance of viewing interactivity from multiple lenses, and not from just the perspective of hardware and software systems that generate interactive stories. They posit that it is the combination of "the intersection of several fields of study such as psychology, sociology, cognitive science, human factors, interface design, etc." (Bostan & Marsh, 2012, p. 23). This is an interesting statement to make, that depending on the field of study, the definitions and usage requirements of these elements might differ in how they are used in discourse and research. More than different fields of study, the vital component that brings interactivity as an amalgamated concept is in how the combination of these various fields bring a different perspective that informs the school of thought around interactivity. For instance, interactivity from the lens of interface design deals with the

aesthetic pleasure derived from the design of the medium engaged with and how the way the design looks and “feels” influences interactivity.

Integration

Chibana (2015) makes a compelling note that the seamlessness of different mediums is key to successful integration of interactive storytelling. The core of integration is to provide the user with a holistic experience that successfully conveys stories using different mediums and modes. Chibana (2015) outlines the effectiveness of successful integration thus, “If done right, viewers forget they’re reading text, listening to sound effects, looking at visuals and scrolling down all at the same time and begin to experience it as a whole.” (Chibana, 2015).

To expound on Chibana’s comment on integration, integration works in tandem with immersion which seeks to give the user a deep dive into the story using different medium effects such as audio, images, animation, video, dialogue to effectively convey the story to the user. Integration is about the seamlessness of the various components like audio, images and dialogue. The key factor in this is for the various elements to be incorporated in such a way that they are not a hindrance to the storyline but rather an enhancement to the enjoyment derived from experiencing the story. This concept of integration will be explored further in Section 4 which provides a reflective account of how this tenet was incorporated in *Malagwane Ruins Odyssey* nonlinear fiction narrative.

Key to this, as highlighted by Heyes (2014) is ensuring that the story can be viewed on multiple devices – mobile, tablet, Personal Computer, etc. Not only that, notes Heyes (2014), but the ethos of integration should also incorporate links to other content/mediums where viewers are given more platforms to access the story. Take for instance, how websites can be viewed from your phone, PC, and tablet. What this translates to, as far as transmedia storytelling, is that the story can be shared across different platforms to reach a wider base. From the perspective of the interface design and language script, it is important to understand whether the medium you are using allows for the integration of links to other sites/content spaces. A website is

a good example of a medium that allows for integration of links that are shareable to social media channels. Integration as a tenet will be unpacked more in Section 4.

Impact

Keyes (2014) notes that the core of impact as a tenet of digital fiction storytelling is that it should evoke/arouse emotive responses from the user/player/viewer. It should evoke emotions that speak to the purpose of the story, the message it drives across and the actions the user takes during and after the experience of the story. This tenet of interactive storytelling drives the point across about the importance of understanding the role of impact as a principle of storytelling by looking at how participants perceive the story through their actions and responses. In discussing the tenet Immersion above, the key drivers of an immersive story experience were extolled by Roth and Koenitz (2016) who discussed the concept of transformation through the lens of positive and negative affect. This closely ties in with impact which underscores the emotive affect of the journey of experiencing a storyworld and traversing the worldbuilding of a particular story and taking a series of meaningful actions to progress the story forward.

The tenet *Impact* touches on all the other three tenets of storytelling by looking at the following:

- The immersion experience the story affords through its medium choices and combinations (audio-visual, images, etc.)
- Interactivity – level of agency afforded to the user and how the interactivity affords user certain choices
- Integration across different/multiple channels and devices and integration of different medium elements like sound, imagery, etc. (Heyes, 2014)

The creative practice project will seek to demonstrate how *Impact* as a tenet plays a role in the three chosen mediums Twine, Ren'Py and Interactive Website domain. To expand on this, it is imperative to once again to bring into focus the two core aspects of impact – reaction and action. What reaction will these stories (created in the mentioned platforms) evoke in the end user? How does each platform impact the

user through the output media and interfaces used? What action does the user take after being impacted by the story created on platforms? The impact speaks to how users process the story and what actions (if any) are taken after interacting with story. Some actions the user could take would be to share the story with others and talk about how the story affected them, what they loved about the story and what resonated with them the most while experiencing the storyworld.

I have discussed the end-user specific core tenets of interactive storytelling above and given context to the tenets that are centred on the user and the user experience. 2.4 below will discuss the author/creator core tenets of interactive storytelling which are focused on the systemic side of storytelling production that zone in on the configuration elements that are used to create interactive stories and how these affect the type of interactive stories created through these programs and their interfaces.

2.4 Author/Creator Tenets of Interactive Storytelling

As deduced from the framework in 2.2 above, Kim, Moon and Han's (2011) interactive storytelling systems are the basis from which I have framed the author/creator tenets of interactive storytelling. I will break down each of them in order to understand the mechanism and implement them in my own creative work which will be discussed in detail in Sections 3 and 4.

Interactive storytelling comprises these elements that form the basis of the framework:

- Narrative Structure
- Authoring Tools
- Output Media
- Interface (Kim et al., 2011, p.221)

I will delve more below into the components of the author/creator tenets as listed above. To assist with the interpretation of the above-mentioned components is a diagrammatic illustration of these components by Kim et al. The gist of Kim et al.,

(2011) digital interactive storytelling can be summarised in a diagram format as presented below:

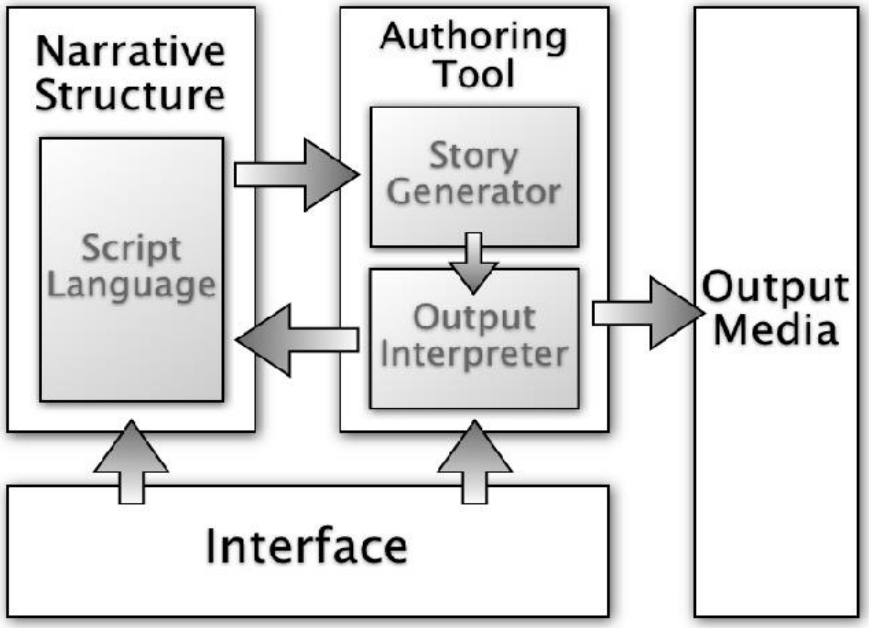


Figure 4: An Interactive Storytelling System (Kim, Moon, & Han, 2011, p. 221)

As can be deduced from the diagram above, the four key author/creator tenets of interactive storytelling are: Narrative Structure, Authoring Tools, Interface and Output Media. A narrative structure is the operational framework of a storytelling system. A huge component of a narrative structure is the script language. The script language is the programming language of the system of a particular medium or platform that is computer-mediated in a way that is understandable for the author and programmer. Authoring tools are tools that a system has inbuilt that are used to assist the author to generate the storyline through particular input commands that result in an output. Output media is the media that is used during the story creating process that comes as an affordance by a particular medium or platform. Some examples of type of media are images, sounds and sound effects. Output media will be explored further in Sections 3 and 4 through the creative process of *Malagwane Ruins Odyssey* and the output media that Twine, Ren'Py and Interactive Website allows as an affordance. Interface pertains to the visual aesthetic of a particular medium or platform. This is the "screen" of various mediums. Not only that, but the interface embodies the visual representation of communication systems where the user

interacts with the computer through the interface. The interface acts as a conduit between the user and the computer.

With these elements in place, the digital interactive storytelling is presented in different digital software platforms that are based on these four tenets. For instance, the interface of Twine – a web-based interactive fiction storytelling platform – will be different from the interface of Wattpad – a web and mobile reading and writing software used for digital storytelling. Both Twine and Wattpad by design have different output medias.

I have given a synopsis of the author tenets above; I will now discuss these a bit further below.

Narrative Structure

Narrative structure can be understood as the "bare bones" that are required to process stories by providing a foundational structure on which stories are premised. A narrative structure is the operational framework that underpins how a story is designed, the order and manner of arrangement and how it is presented to the end user/reader. To further clarify narrative structure within the realm of interactive storytelling, Harmut Koenitz – a professor specialising in Interactive Narrative Design – outlines Janet Murray's (digital media professor and renowned author) essential elements of Interactive Digital Narrative (IDN). Koenitz (2015) outlines four key elements: *procedural, participatory, spatial* and *encyclopaedic*.

The procedural elements of interactive narrative structure pertain to the ability of a computer to execute certain functions – the design of a certain program and the language used to execute output. Participatory deals with the proficiency of the computer system or program to execute input commands by user (primarily the author who creates story in program). Spatial element "denotes the ability of computers to represent space," and lastly, encyclopaedic denotes a computer's ability to display and represent data (Koenitz, 2015).

All these key elements play a role in understanding narrative structure as pertains to Kim et al's framework tenet for the creator/author who utilises computer program to create interactive stories. The principles above represent the narrative structure

environment provided for the creator by the program used. I will explore the narrative in Sections 3 and 4 by breaking it down through the creative practice processes for Twine, Ren'Py and Interactive Website, and the reflective process of how the narrative structure aspect of author/creator tenet plays a role in how the story is created and presented.

An important component of narrative structure is script language. Kim et al (2011, p.221) define a script language as a system where authors and programmers process narrative structure in a language they understand and one that is computer-processed for easier output results. Key to this is how the information in the system is arranged using a script language to design the machinations of particular digital storytelling platforms. "The script language is fundamental to an interactive storytelling system and is used to develop story generator and authoring tools, making it possible to generate stories." (Kim et al., 2011, p.222). If one had to provide a linear presentation of this information, it would look like this:



Figure 5: Linear Representation of Interactive Storytelling Systems (Mogale, 2021)

Figure 5 above shows a simplistic representation of Interactive Storytelling Systems that begin with the composition of a narrative structure which comprises a script language used to develop the information of that particular programme. One can infer from the assertions made by Kim et al., (2011) that narrative structures are the foundation upon which authoring tools and techniques can be built and used by the authors to generate stories for a particular output result, delivered in a particular media. The media the story is delivered in has close ties with integration and impact. These elements tie in with the importance of integration of stories across different

media within the ambit of transmedia and the shareability of stories for accessibility across multiple streams. The impact derived from stories influences the media each platform affords and how the media play a role in eliciting emotive affect through impact.

Authoring Tools

An integral aspect of authoring tools can be explained by the component storytelling generators and output interpreters. Storytelling generators are input systems that authors use to create a story within a platform. These input devices are used to draft the story elements in the backend of the medium/platform. With Ren'Py, for example, the authoring tool is a jEdit editor where the story components are written and interpreted. This will be discussed properly in the next two sections through *Malagwane Ruins Odyssey* creative process and the reflective process that outlines the role the tenets have played in the knowledge production process. The importance of storytelling generators and authoring tools is that they are set up in a manner that users can interact with the program even when they have little programming knowledge (Kim et al., 2011). This gives creators the impetus to create stories without having to go through rigorous training for coding. The environment in which stories are created should allow the authors to create using script languages without impeding on the steep curve of programming languages preventing novices from creating compelling interactive stories.

Crucial to this is providing a support structure where tools to create are not only readily accessible, but can be learned in a few tutorials; videos, how-to guides and other learning assistance tools. These should be available to guide the authors in the creative process. The availability of guides assists the author in the creative process when they get stuck and they can use them as reference material to look up certain elements of the platform they are using to create the story. The reference guide contains pertinent information about different elements that are part of the narrative structure of a particular platform. The accessibility of reference materials then becomes important during the creative process to identify elements that the author either wants to inculcate into their story or uses the guide to navigate to correct

errors they may encounter during the creative process. More of this in Sections 3 and 4.

Output Media and Interface

As can be deduced from Kim et al. diagram in Figure 4, the output media of a storytelling system is the type of media the story can produce through the affordance of the particular medium or platform. A medium that can only produce images as an output media cannot produce other forms of media like sounds, sound effects or text. The output media is a result of all the previous components discussed above and how these narrative structural elements and authoring tools contribute to the type of output media that a particular medium will provide. In Sections 3 and 4, these will be discussed further through the creative and reflective processes of knowledge production and the importance of the types of output media and the impact they have in how the story is enjoyed.

The interface of a system is the conduit through which a computer-mediated system provides communication with the human recipient on the other side of the interface. The interface is the conduit or buffer between these two integral aspects. The interface can also be deemed as the frontend component of the system where the user interacts with the program through the visual screen in front of them. The role the interface plays is quite stark. This role will be analysed properly in the next two sections of the research.

This section sought to discuss the two sets of core tenets that underpin interactive storytelling: end-user specific tenets and author/creator tenets. Before I discussed these tenets, I provided a history of the world wide web and hypertext to set the groundwork for digital interactive storytelling and how it came about. In providing the theoretical aspects of the two sets of tenets, I was elucidating the importance of the grounding principles of interactive fiction storytelling from two perspectives: from the perspective of the end-user who interacts with the end result, which is the final story product, and the author who creates the story from scratch and uses computer-mediated systems to create the story on different platforms. These platforms, as I've pointed out in several parts of the section are Twine, Ren'Py and Interactive Website. Through these platforms, the following sections will delineate the creative

and reflective processes from my story *Malagwane Ruins Odyssey*. The next section – Section 3 – will outline the creative process through the lens of three key aspects – structure, affordances and limitations – of Twine, Ren'Py and Interactive Website of *Malagwane Ruins Odyssey*.

SECTION 3: CREATIVE PRACTICE PROCESS

This section highlights the creative process for each platform – Twine, Ren'Py and Interactive Website. At the heart of the process is the core tenets presented in the previous section – author and end-user core tenets – and how these have been inculcated in the creative process. Another key component of analysis for this section is an analysis of the three platforms according to three taxonomies; structure, affordances and limitations.

The process involves, over and above the three taxonomies as outlined above, the technical processes of each and how those tools have been used to successfully render the short fiction story *Malagwane Ruins Odyssey* on all three platforms. I chose to do my research through the lens of creative practice-based research because I am a creative who wanted to use her creative skills to create a project as a form of knowledge production to complement the research. I was not interested in just merely studying other scholars' research, but wanted to go through the process myself as a researcher and document my own observations and how these inform the results and knowledge obtained from the process. More than that, the concept of practice-led research appealed to me the most than other types of research which I have encountered in my work as part of Wits School of Arts (WSOA). This type of research piqued my interest and I started digging into it more and came across practitioners like Henk Borgdorff (see Section 1).

3.1 General Overview

Malagwane Ruins Odyssey is an investigative and adventure interactive fiction non-linear story which takes place in two central places - Malagwane and Mbabane in Eswatini. The setting of this story is important to me because I was born in Eswatini (formerly Swaziland), and for me the central reason for making the settings thus is it is important to tell stories from a context that depicts one's own perspective and geo-positionality. The importance of positionality stems, for me, from Walter Mignolo's – author of article *Epistemic Disobedience, Independent Thought and Decolonial Freedom* – concept of the decolonisation of knowledge and the epistemic

disobedience of knowledge which speaks to writing narratives that give a different perspective than the Global North. The Global North (the West) has long-held the zero point of knowledge production. Mignolo calls this the hubris of the zero point which points a finger at the Global North for wanting to be perceived as the default knowledge producers (Mignolo, 2009, p. 160). The Global North, according to Mignolo, have pushed the narrative for centuries that knowledge produced from their central point is objective. Mignolo dispels that by pointing out that knowledge is inherently subjective as it is determined by positionality of the knowledge producer and their perspective which is influenced by a variety of geopolitical factors. For me as a researcher in the creative field, it was important to, in my own way, contribute to decolonise knowledge through authoring a story from the Global South perspective.

Malagwane Ruins Odyssey tells a riveting tale of the disappearance of residents of Makotasi in Malagwane area and how these disappearances were initially thought to be tied to the search for lucrative precious commodities like gold, silver and other metals. What transpires is a whirlwind of adventures that link investigations to Malagwane Empire and the subsequent demise of said empire.

As the author of this story, I had to be cognisant of the different allowances each platform fosters, the structural compositions, and the limitations each platform present. In creating this fiction piece, the principal component was interactivity and how to incorporate certain interactive elements in the story, relative to the platform used. In the next sections, the creative process for the story in all the platforms is broken down.

3.2 Twine Creative Process

Twine is an interactive fiction tool that was created by Chris Klimas in 2009 – an award winning interactive fiction writer. Friedhoff extols the inception of Twine by saying, “Twine is a platform that supports the creation of interactive stories that have branching narratives and variable states.” (Friedhoff, 2014). The creating of branching narratives is the ethos of interactive fiction storytelling as it plays right into the domain of hyperlinks that foster this type of creativity. In Section 2, I discussed

the importance of hypertext in setting the groundwork for digital interactive storytelling.

Structure

Twine, as outlined above, is a tool for creating nonlinear multi-branching narratives. It is a text-based visually-driven story generating tool that is driven by interactivity by its very nature. The subsequent information in this section breaks down Twine's structural components to demonstrate what Twine is, what it looks like, and what it offers as a platform for digital interactive storytelling. At the core of this, is taking into cognisance how the core tenets for both the end-user and the author are applicable in this medium/platform. I used Section 2 to benchmark the context of the two sets of tenets.

In creating *Malagwane Ruins Odyssey*, the first thing I had to do was download Twine from online Twine open-source website to a personal computer. The primary reason for this is that even though Twine allows for creators to create game stories online, information can be lost as soon as changes are made through the website browser. For instance, performing cache action to the browser erases all the information created. Downloading the software to a personal computer prevents that and affords the author the ability to create offline in an environment native to the software application. As part of the author tenets and in particular narrative configuration, I had to be mindful of how the native rendering of stories on Twine through its downloadable application offers more latitude to create without fear of information disappearing without being stored.

On opening the application, the first thing one sees is a visual layout that is akin to a pinboard that pins stories in one interface. The interface, as discussed in Section 2, forms part of an integral component of the framework of author/creator tenets that serves as a visual communication conduit between the computer-mediated software program of Twine and the user (see diagrammatic illustration by Kim et al.). To explain this further, figure 6 below demonstrates the current layout I have in my Twine storyboard.

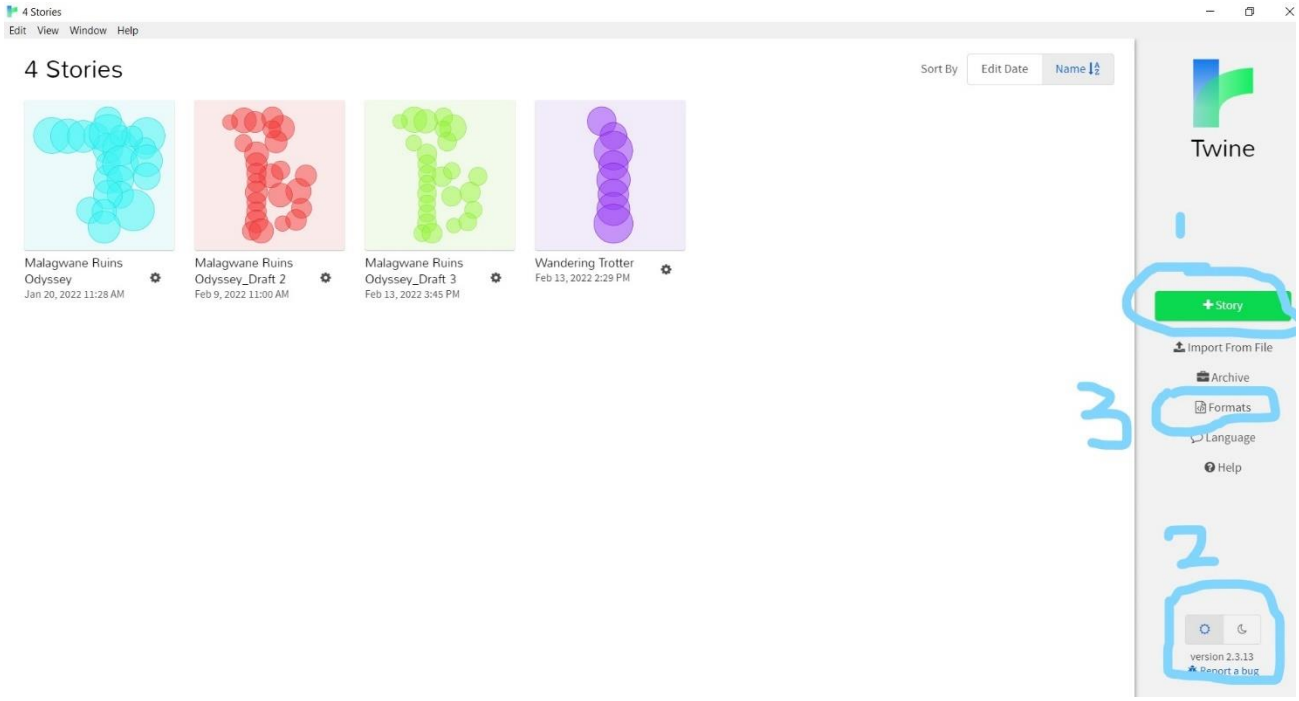


Figure 6: Twine Storyboard Interface Display (Mogale, 2022)

To expand on the highlighted elements denoted in Figure 6 above, the element denoted by number 1 demonstrates a clickable button that one clicks to create a new story. Clicking on this button will display a different interface that will enable one to label their story before creating it (more on this below). As outlined by Kim, Han and Moon et al. (2011), the interface is a crucial part of the author tenets that is influenced in large part by the narrative structure and scripting language. Number 2 highlighted denotes the latest version of Twine I downloaded – version 2.3.13. The number 3 highlighted shows the formats that the author can use to create their story. Navigating this landscape of Twine as the author is important in understanding how the medium works to facilitate the creative process.

Expounding on number 1 highlighted, the following image demonstrates how one *Malagwane Ruins Odyssey* draft looks like:

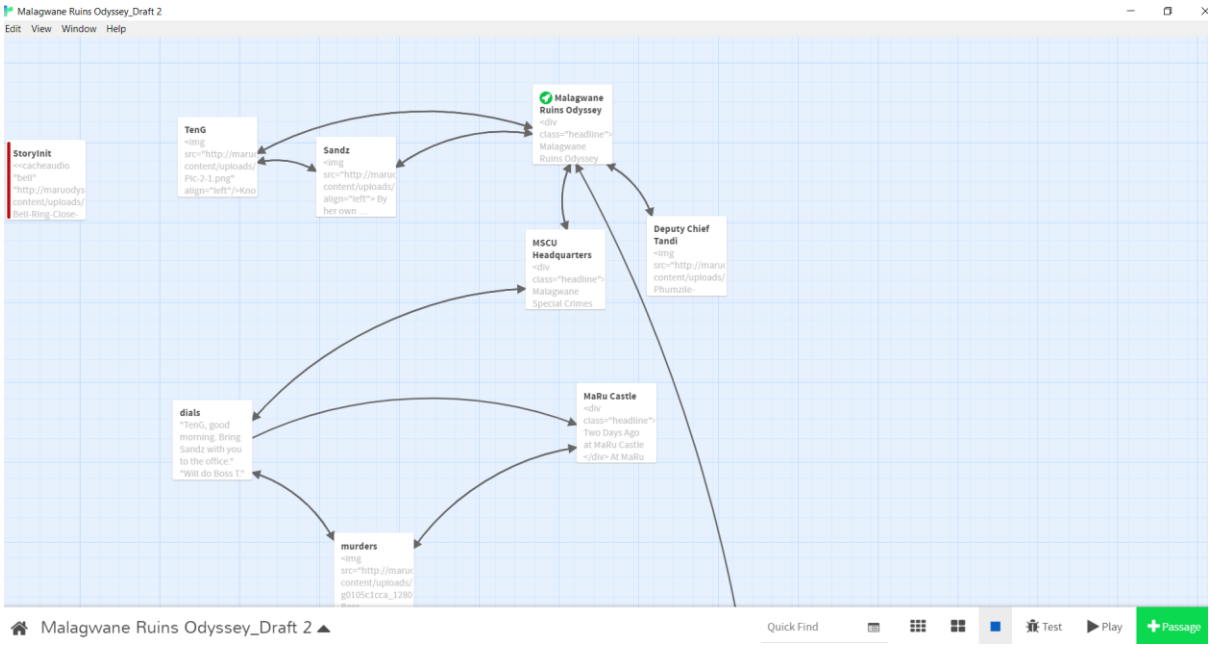


Figure 7: Illustration of Twine passages and the links/nodes that connect them (Mogale, 2022)

The Twine interface works on a system of links/nodes and passages that link one part of the story to the next. A passage is a square-shaped block that contains a part of a story. It is integral to the creation process because it works the same way different chapters of a book work. It is synonymous to book chapters or sections. Like book chapters, what becomes important is linking subsequent chapters with previous chapters to advance the trajectory of the story. Bernstein (2009) discusses how the sequence of events in a reading is a plot that is driven by the choices the player makes in advancing the story forward. On the other side of the coin is the author who has to be cognisant of the choices they provide the player.

To encapsulate the gist of the paragraph above, the concepts I've laid out tie in with the previous section where I touched on Aarseth's (1997) concept of Ergodic Literature and the importance of being mindful of the importance of non-trivial linking and creating meaning-making that is impactful for the user. During this process of creating *Malagwane Ruins Odyssey*, I was cognisant of Mason's definition of narrative immersion and why the story needs to provide an immersive experience for the user. Mason also touched on mechanical immersion and the role it plays in influencing the player through the system's game mechanics, constraints of the

system and its constructive elements (Mason, 2013). This will be touched on more under affordance in the next portion of this section.

Putting a magnifying glass on some the passages, three examples from the story will be used to explain how they work.



Figure 8: *Malagwane Ruins Odyssey* passage front-end interface, with links (Mogale, 2022)

Figure 8 above illustrates the beginning of the story. The words that are highlighted in blue as per image above are the links that, when clicked, show the next passage of the story. Links can be used to either advance the story forward to the next passage or can be used to illustrate some components of the story that give more information about the character. For instance, clicking on TenG, Sandz and Deputy Chief Tandi will give more information about who these characters are. In this creative process for Twine, I had to be aware of how I was providing context for the characters in alignment with Heyes' question of Immersion as a user tenet where he asks, "Do the characters have a backstory?" In crafting these main characters, this was front and centre to incorporate in the creative process so that users who get immersed in my story understand TenG, Sandz and Deputy Chief Tandi a little bit more and how they perceive the world.

Clicking on the START link begins the story to the next passage, illustrated below:

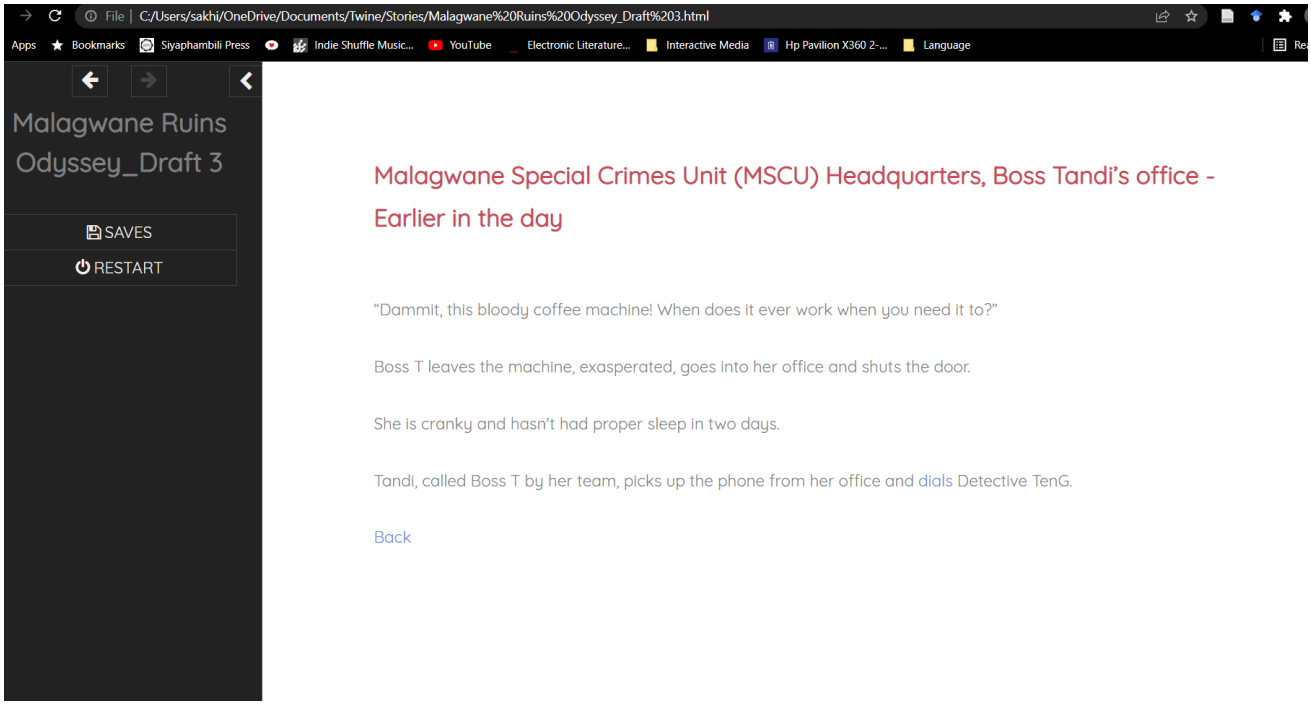


Figure 9: MSCU Headquarters Twine passage (Mogale, 2022)

The premise of the creative process for computer-based interactive storytelling systems is based on the framework of Kim et al's diagrammatic illustration (2011, p.221). I borrowed this framework and dressed it as author/creator tenets. These tenets will be discussed below specifically for Twine (and in subsequent parts of this section for Ren'Py and interactive website). To reiterate the author tenets, these are:

- Narrative Structure,
- Authoring Tools
- Interface, and
- Output Media

As discussed in Section 2, the narrative structure of a programme deals with the scripting language upon which the programme is built. Twine uses Hypertext Markup Language (HTML), Cascading Style Sheets (CSS) and JavaScript to create game stories. HTML was designed for display in web browsers. That means with every Twine story created, the output result is an HTML link that can be viewed in any web browser. CSS, on the other hand, is a scripting language that deals with the styling components of narrative structure. CSS works hand-in-glove with HTML. It styles

HTML components of a story. To give an example with *Malagwane Ruins Odyssey*, Figures 10 & 11 below illustrate HTML and CSS in action, respectively:

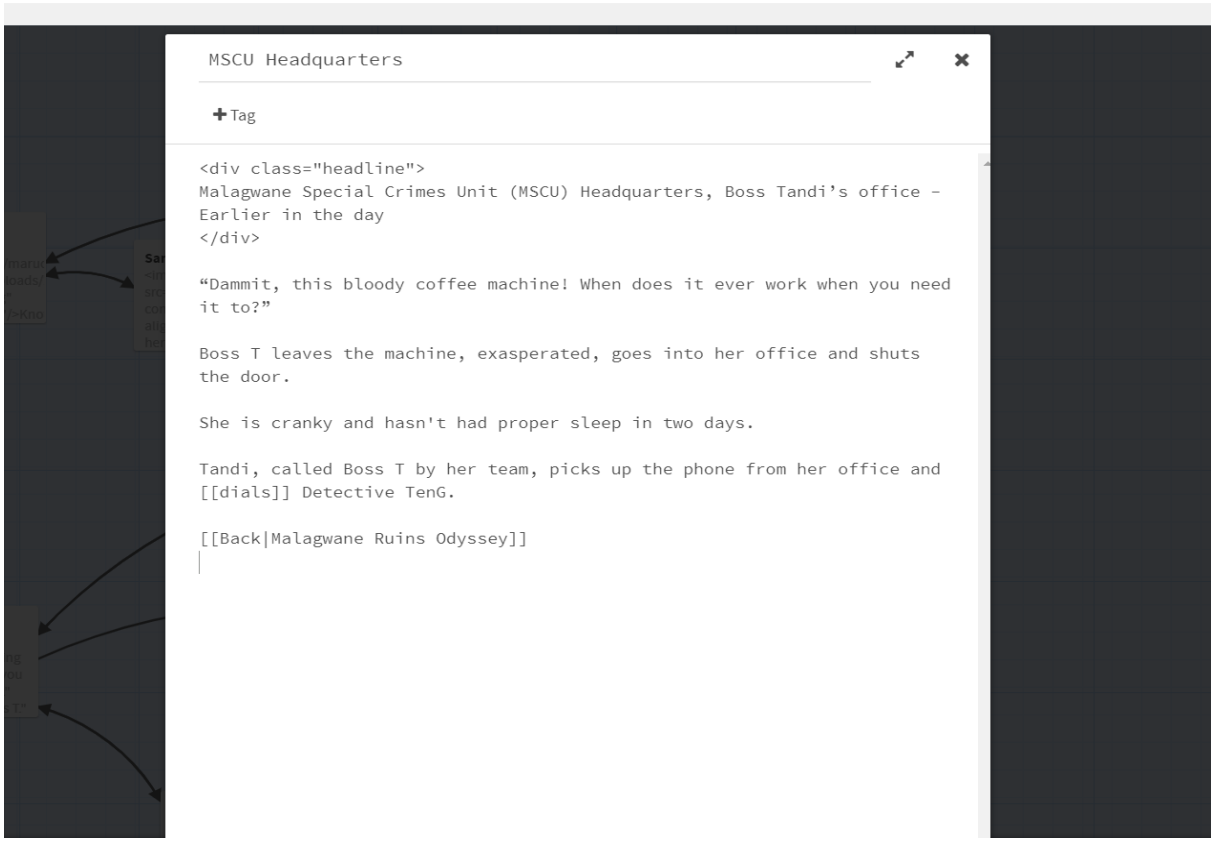




Figure 10 (top): Illustration of HTML div element (Mogale, 2022) & Figure 11 (bottom): Illustration of story stylesheet (Mogale, 2022)

Before delving into the particular components depicted by the images above, it is essential to note that Figures 10 and 11 illustrate Twine's visual editor. This means that the author inputs their text into the editors shown above. Figure 9's visual editor is for each passage of the story where text and other effects are input elements. On the other hand, Figure 11's visual editor is for the CSS stylesheet where relevant styling components are input elements on the back end of the story. These visual editors for Twine are known as authoring tools, as explained in Section 2 as part of the author/creator tenets. These authoring tools are story generators that facilitate drafting the story using these editors as a visual layout board – in Kim et al. diagram this was presented as an output interpreter.

Delving a bit deeper into the input components of HTML and CSS using the examples from the figures above, Figure 10 shows the HTML element called the div element. The div element is enclosed by what is called tags in HTML speak. For HTML to render properly in most instances, the opening and closing tags of any element should be used. * * is an opening tag and * * is a closing tag. This is analogous to opening and closing statement or open and closed quote marks in a different context. For every opening quote, there must a corresponding closing quote. This is how HTML renders its input elements so they give the correct desired output.

CSS gives HTML style. Where HTML is "bland" CSS gives it "colour and glam" to produce a more aesthetic pleasing output. Taking a closer look at the div element with the class "headline" attribute (Figure 10), when this same attribute is used to style the element in CSS, Figure 11 illustrates that styling element as:

```
.headline {
    font-size: 150%;
    font-weight: bold;
    color: #c94b57;
}
```

The above styling elements give more input about how the "headline" element should be styled, that is, what size it should be, what weight it should be, the colour,

etc. In the same way that HTML has opening and closing tags, CSS is denoted by opening and closing curly brackets which must be used to input elements for the language to render properly. If the curly brackets are omitted, this will not style the elements in question. Figure 12 below illustrates this clearly:

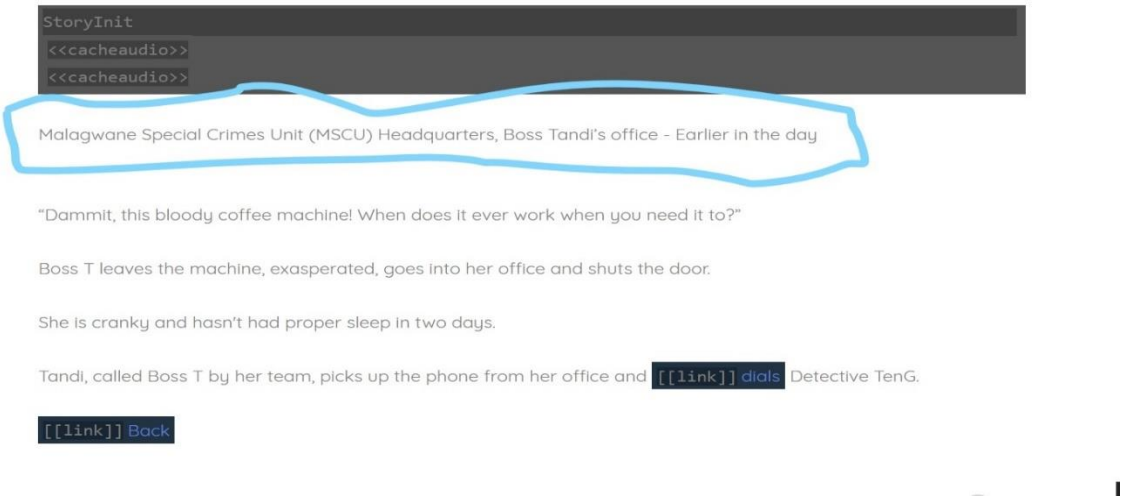


Figure 12: Illustration of CSS styling (lack of) with omitted curly brackets (Mogale, 2022)

Figure 12 above can be directly contrasted with Figure 9 which shows a red headline that is in a larger font size and is bold, whereas Figure 12 shows normal text. What was supposed to be a distinct headline (highlighted in blue in Figure 12) ended up being normal text because of the omission of curly brackets.

The components I've broken down from Figure 10 form an integral part of the narrative structure, which is the operational framework of systems/programs/applications which underpin the configuration of programs using programming languages such as HTML, CSS and JavaScript for Twine. In other software programs like Ren'Py, the narrative structure scripting language is Python, which I will discuss under Ren'Py, is different from Twine. Narrative structure connects here as an author/creator tenet based on the framework I derived from Kim et al. , as discussed at length in Section 2. Laying out the process above and demonstrating the narrative structure components I came across during the creative process serves the goal of demonstrating the precise nature of narrative construction scripting languages. In much the same way that spoken and written languages have

certain conventions, this is just as applicable in narrative construction of interactive computer-based fiction stories and games.

The next component of this section speaks to the affordances of Twine, from both a structural component and user component.

Affordances

The backbone of interactive storytelling is rooted in the affordances that different platforms and mediums provide, and how these affordances contribute to the immersive experience of the user/player/consumer. I have been able to explore some of the affordances that Twine has inbuilt to contribute to its functionality and enjoyment. From a visual aesthetic lens, Twine's interface is vested on its story formats. What this means is depending on the story format chosen, the end result displayed will be different.

Extrapolating from Figure 6 for Twine's interface display, the highlighted number 3 is about Twine's story formats. When that is clicked upon, it shows the following story formats depicted in Figure 13 below:

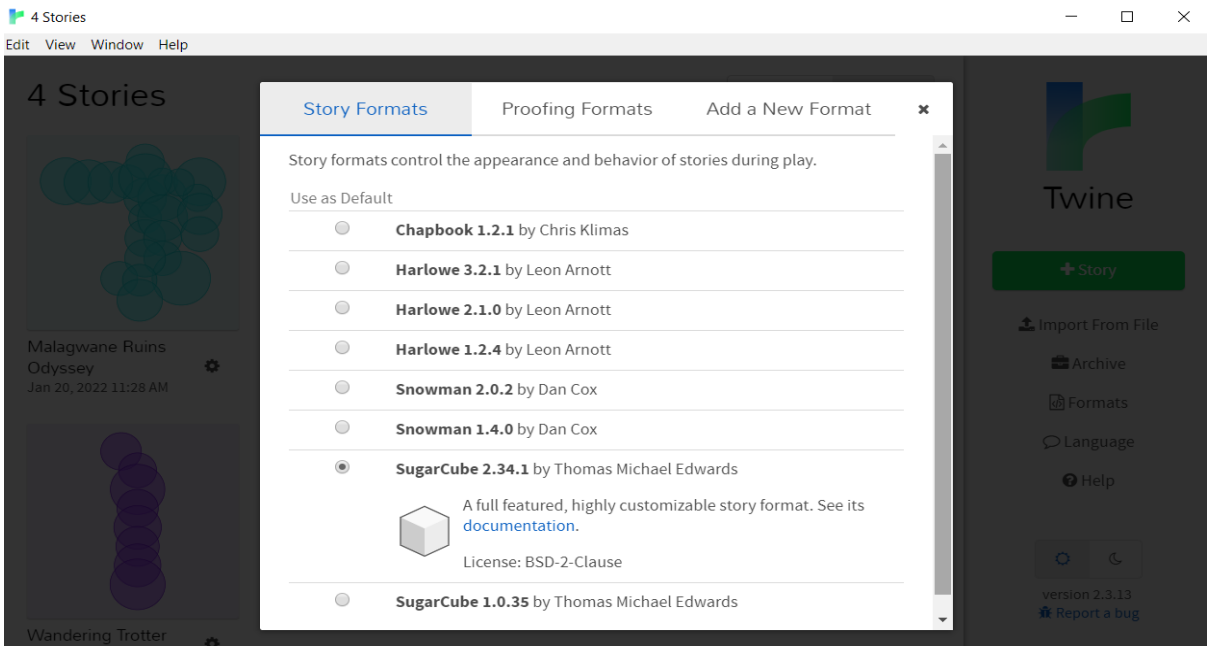


Figure 13: Twine Story Formats (Mogale, 2022)

As per the image above, Twine story formats are; Sugarcube versions 1 and 2, Snowman versions 1 and 2, Harlowe versions 1 to 3, and Chapbook version 1. The integral aspect of these various story format versions is the syntax they each use. Different story formats use different syntax – the author has to consider that when deciding how they want to create their story and what affordances that syntax can allow for that story format. Affordances of a particular syntax also come with constraints for that system. Constraints of a program system are alluded to by Stacey Mason who outlined the key factors of mechanical immersion, where she mentions that mechanical immersion is influenced by the constraints of a system, the mechanics of the system and the constructive elements. Harlowe, which is a default story format for Twine, was designed for the author who has no coding knowledge who can jump straight into the story creative process without a steep learning curve in understanding the narrative structural elements of that story format. Conversely, Snowman was designed to cater for more advanced programmers who can manipulate, use and create their own syntax using the framework of Snowman format. Sugarcube, on the other hand, is the "middle road" format that was designed with the user who can start off with no experience in coding but can use advanced functionality for certain elements, depending on the media incorporated into their stories. All of this is to say that the affordances that Twine provides in its narrative structure is determined by the story format chosen and the level of mechanical immersion for the program.

"Each story format provides a different visual layout, set of macros and internal JavaScript functionality." (Twinery.org, n.d). For *Malagwane Ruins Odyssey*, I have chosen Sugarcube version 2 format. To illustrate how the visual interface changes depending on the story format chosen, Figures 14 and 15 below show *Malagwane Ruins Odyssey* MSCU Headquarters passage below in Harlowe Version 3 and Chapbook Version 1, respectively:

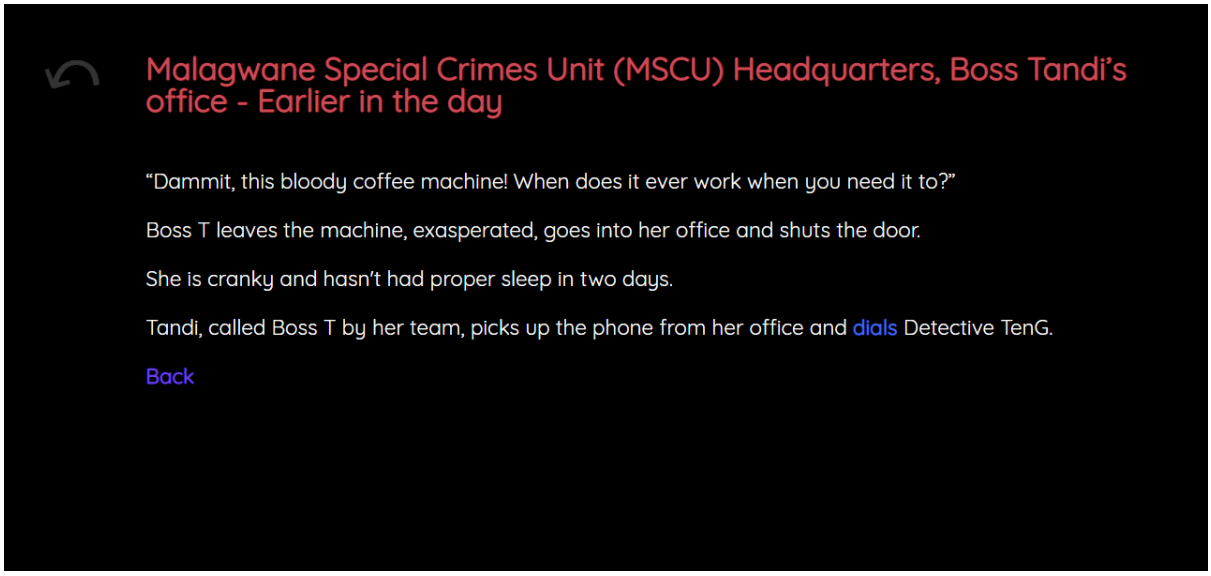


Figure 14: Harlowe Version 3 Story Format Visual Interface (Mogale, 2022)

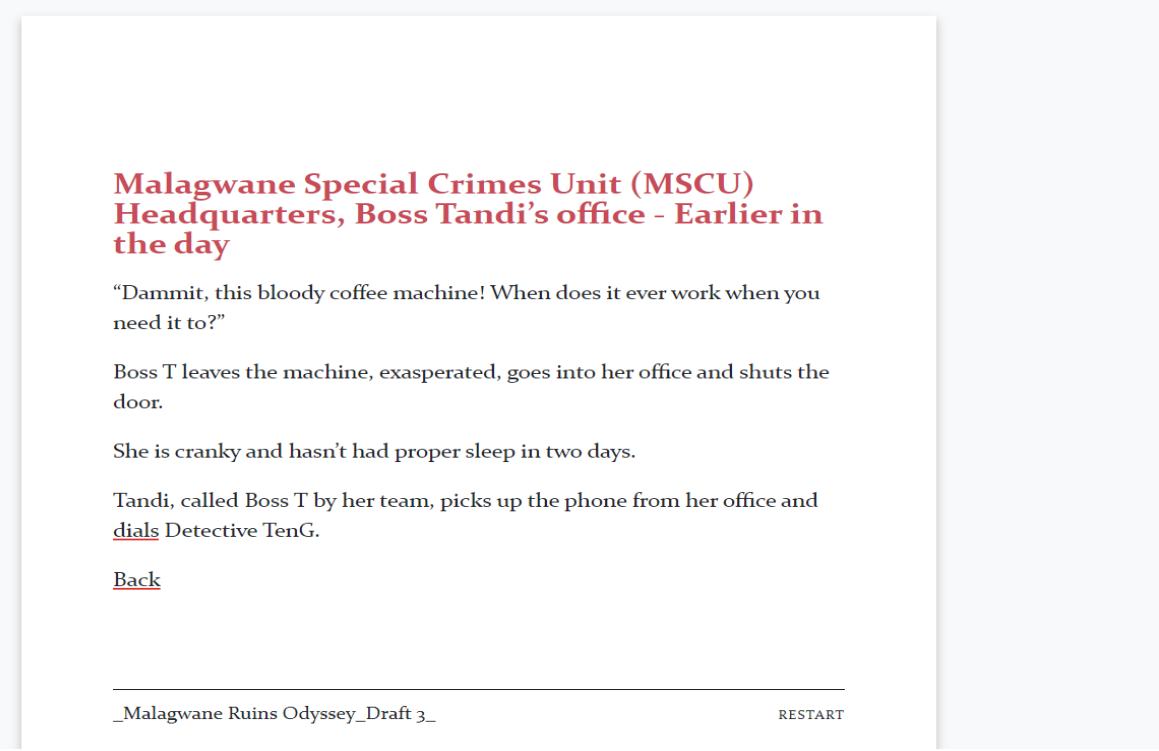


Figure 15: Chapbook Story Format Visual Interface (Mogale, 2022)

As deduced from Figures 14 and 15 above, the visual aesthetic that has been inbuilt for each story format plays a role in the immersive experience of the user. The affordances each story format provides is based on their scripting language

functionality. These affordances are determined by macros. “Macros allow programming code to be intermixed with text shown onscreen. They allow a wide variety of functionality to be added to a story, from changing the appearance of text to reacting to mouse and touch events” (Twinery.org, n.d). How macros are used depends on the story format, i.e., Harlowe has different macros to Sugarcube.

Some of the macro functionalities I explored in creating *Malagwane Ruins Odyssey* included adding sound effects such as gunshots and doorbell sounds, adding a tabulated description of key characters, timed texts, etc. Figure 16 below illustrates a table format for the character TenG:

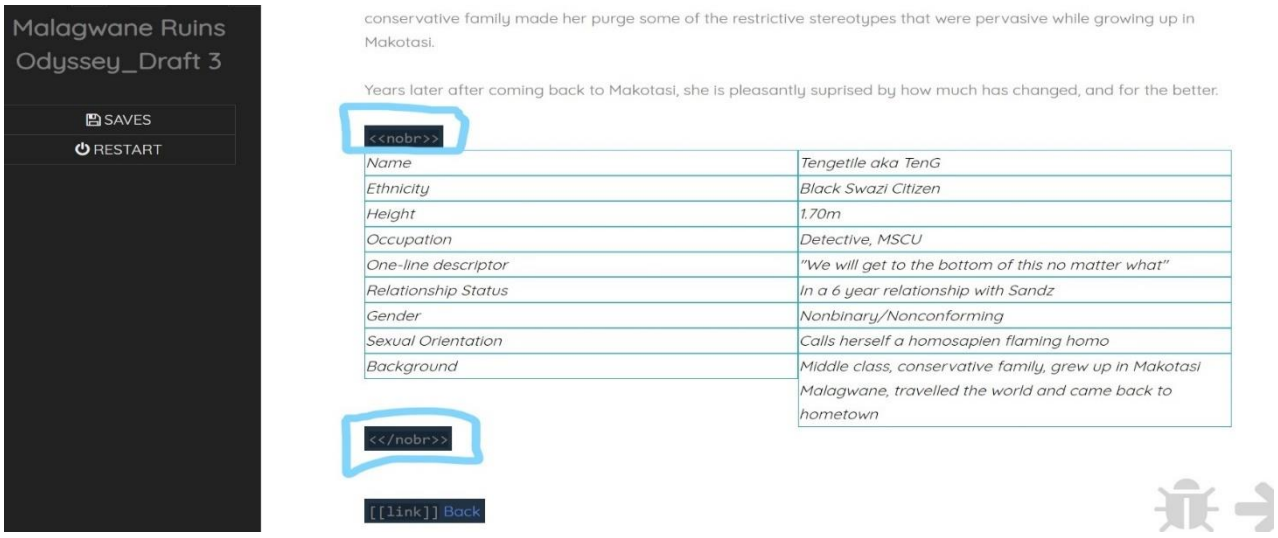


Figure 16: Tabulated Visual Aesthetic Contained by <<nobr>> Macro (Mogale, 2022)

The <<nobr>> (no break) macro highlighted is a functionality of the Sugarcube story format. This same macro used in another format would not render the result properly. It is key to note that the image above shows this functionality while the author is still building the story. Upon publishing of this story, the macro itself ‘disappears’ and shows a clean finish for the user. To demonstrate further the functionality of the <<nobr>> macro in Sugarcube, this same macro does not render in other story formats such as Harlowe. This is shown in the images below, where

the first image depicts the macro in Sugarcube story format and the latter in Harlowe story format (Figures 17 and 18, respectively).

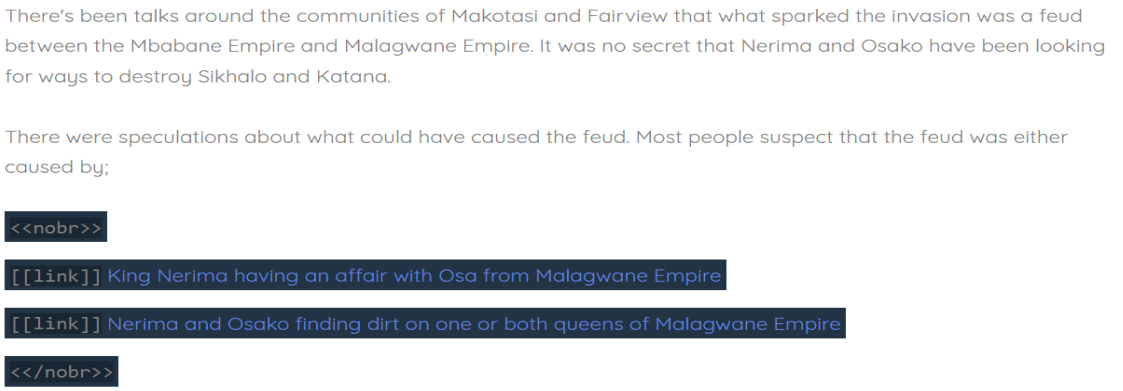


Figure 17: Sugarcube Story Format <<nobr>> Macro Contains User Choices (Mogale, 2022)

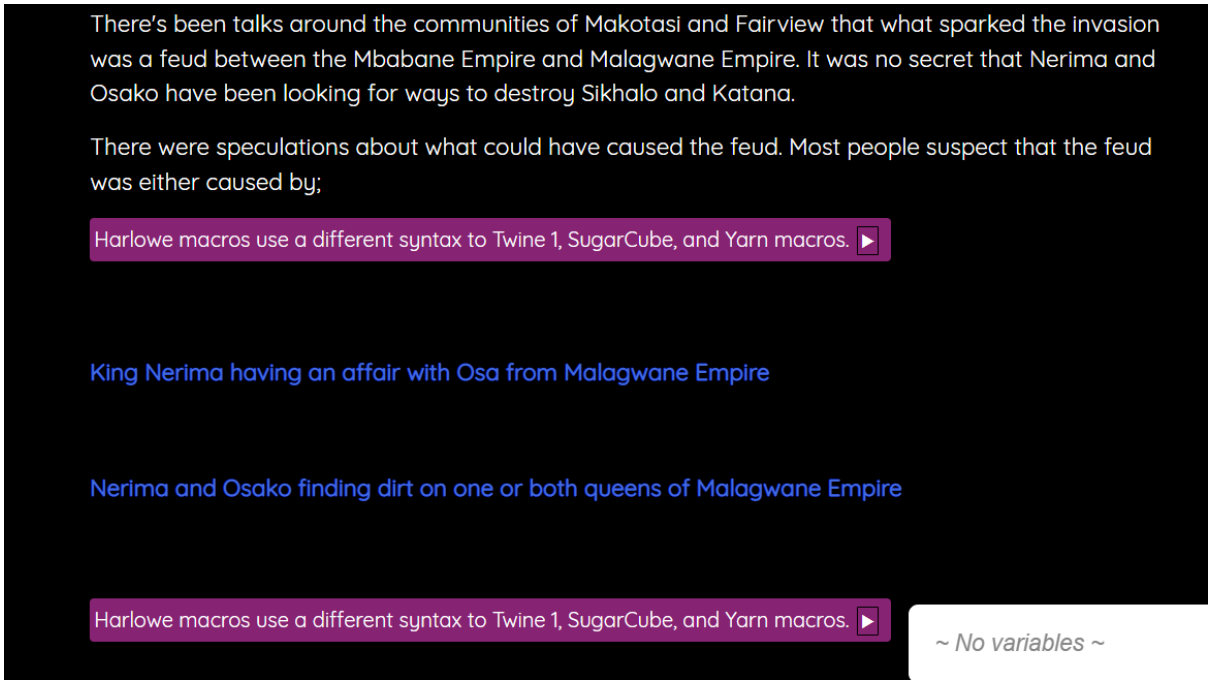


Figure 18: Harlowe Story Format Rendering Error with Sugarcube Macro (Mogale, 2022)

As can be deduced from Figure 18 above, the <<nobr>> macro did not render properly in Harlowe story format because it is a different syntax, that is, if the same macro were to be used for Harlowe, the input syntax language would be different. In Harlowe, macros use parenthesis [()] as part of its syntax configuration, whereas Sugarcube uses two less than and greater signs [<< >>] facing each other. For

Figures 18 above, not only did the macro not render properly in Harlowe, but as demonstrated above, there is a noticeable break between the two choices offered, whereas there is no break between the choices in Figure 17 because of the no break macro that contains the text and gives it no break between lines.

Zoning in on the images above, integral to the immersive experience offered by interactive storytelling is the choice-based functionality which allows users to navigate the story through the choices created by the author. Figure 17 above illustrates two choices that the user can click to advance the story forward. It should be noted that this same affordance is not available in non-interactive mediums such as a physical book where the consumer is a passive observer and does not influence the trajectory of the story and there is little agency afforded by the medium. When I was creating my story on Twine, I was mindful of Mason's concepts discussed in Section 2 about two types of choices – Diegetic and Extra-diegetic choices. To reiterate these, diegetic choices provide the user with choices as either representing a particular character or being present within the storyworld as an entity. Extra-diegetic choices are choices which are removed from the game.

I inculcated diegetic choices in my creative process where I want users to see themselves through the lens of the characters TenG, Sandz or Deputy Chief Tandi. I want them to think about whether they resonate with any of these main characters and provide an immersive experience for them as a result of this resonance through the thought processes displayed by each character and the way they think and make decisions for taking action to solve the mystery of the disappearance of residents in Makotasi. For instance, in the part of the story where Detective TenG is interrogating a suspect, would the user resonate with her where she uses more brute force to try to get the suspect to talk as an interrogation tactic, or whether they would much rather prefer the reverse psychology of calling the suspect's bluff to get him to talk. This plays right into Heyes' tenet of Impact and how impact in the context of digital interactive storytelling is derived from the involvement of the user in the storyworld. In providing choices for the user, I wanted to provide them with agency in making meaningful choices at pivotal points of the story. This is in alignment with Aarseth's non-trivial agency as part of Ergodic Literature in dramatic storylines.

Other affordances that I used during the creative process are images to go with the visual aesthetic of the story, as depicted by Figure 19 below:

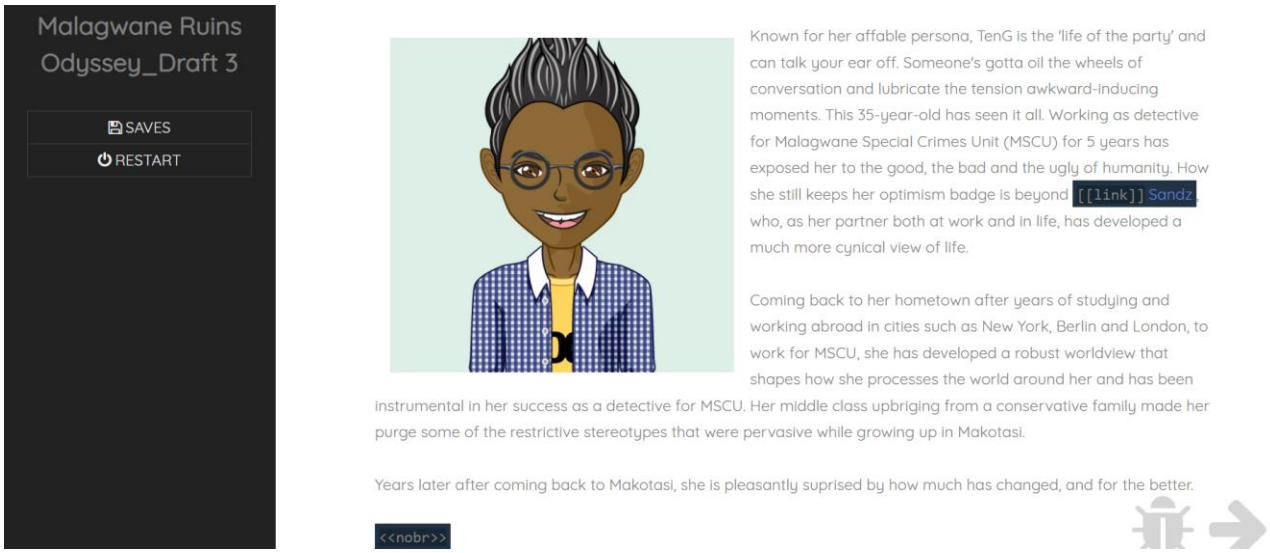


Figure 19: Images as part of Affordance the Twine Platform Provides (Mogale, 2022)

Images play a vital role in storytelling because they introduce a different visual component than text. Twine provides this affordance in several ways, some of which are; images can be used as background images, or as part of the story for various passages. During the creative process, I tried to experiment with creating images as a background for a particular passage ("scene"), but I was not happy with the aesthetic and decided to instead incorporate it as part of the story passage at relevant parts. This worked better and I replicated this in several parts of the story, for instance, to show a visual depiction of Malagwane Special Crimes Unit (MSCU) Headquarters in Malagwane and to give readers a picture of the unit where Detectives TenG, Sandz and Deputy Chief Tandi conduct their day-to-day activities.

The availability of Twine in HTML format as a published story format makes it easy to access in any browser – Chrome, Firefox, Safari, etc. This makes it exponentially easier to access than other games such as Ren'Py which requires the user to have installed Ren'Py in their computer for it to render properly. This means that anyone can be sent the Twine HTML link for them to view the story in a browser, as long as they are connected to the internet. This makes it more accessible to a wider audience.

What is an interesting aspect of authoring interactive fiction using digital storytelling platforms is the accessibility of reference materials for authors during the creation process of the story or game. The author should be able to have easy access to said reference materials – not only that, but they should also be able to interpret the instructions written in the documentation for execution of certain elements in the program (Friedhoff, 2014).

Twine specifically has a wealth of documents available in their website library. More than that, in the downloaded Twine program itself, when choosing a particular story format, for instance Sugarcube story format, there is an accompanied clickable link that directs the author to their website repository for more information on how to execute particular elements in the story, such as how to add images. Friedhoff (2014) speaks of how Twine places an emphasis on the aesthetic appeal geared towards the user. Where other platform place more emphasis towards the technical elements of the narrative construction of a particular platform, Twine incorporates aesthetic elements to their documentation and instructional manuals.

We have looked at the affordances that the Twine platform has for authors and fosters for end users to enjoy through immersing themselves in Twine while interacting with the story. Below, I will discuss the limitations encountered during the creative process of Twine, and other observations I've made from this experience of knowledge production.

Limitations

It is worth noting that while Twine offers a great affordance for the user to be able to play story games through a web browser while they are online, certain elements of the story cannot be rendered properly when the user is offline. Images, especially if sourced from online and are saved in an online repository site, sometimes do not render properly when offline. Figure 20 below depicts this limitation:

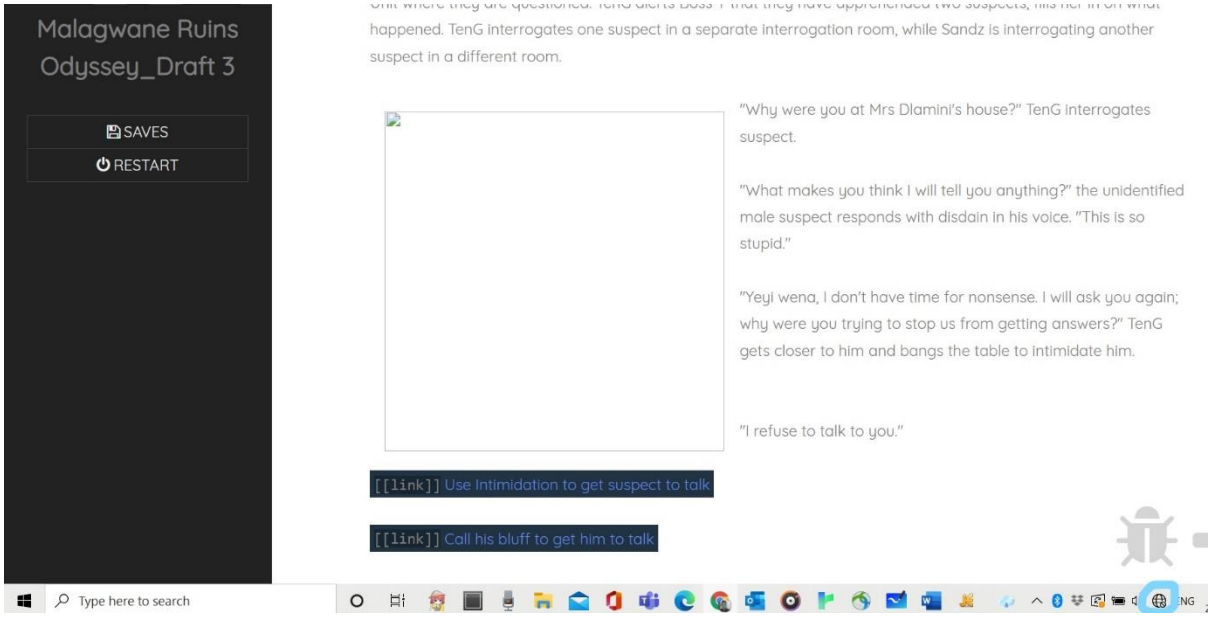


Figure 20: Image not rendered properly on Twine when user is offline (Mogale, 2022)

A stark limitation that is key to understand the impact of the kind of output media utilised is in the understanding of the author who creates the story; a lack of understanding of the creation process to add certain functionalities for the author's story can contribute to not maximising on the systematic abilities of the platform. That is, if the author does not understand the abilities the platform can provide, they run into a difficulty of not being able to execute certain functionalities that could make the immersive experience of the story even better or more nuanced. What is observed in the creation process of any story is the bridge between the composite elements that the author wants the story to have and the actual affordances the system can provide. For instance, an author would desire to add images, but if the configuration system of the platform or medium does not have image functionality, then it would be a moot endeavour.

Yet another glaring limitation I encountered during the creation process is the ability of the available reference material to breakdown concepts in an easy-to-understand format. The available reference material for Twine while generally are easy to follow can sometimes be harder to understand for a user who is newly minted in the area of computer-based digital interactive storytelling systems; a user who has some form of coding and programming knowledge would be able to assimilate these instructions better than a user who had never been hitherto exposed.

In the Twine creative process, I have broken down the components according to Structure, Affordances and Limitations. This taxonomy helps to breakdown the creative process to cover the makeup of Twine, the affordances the medium has in providing enjoyment for the user and techniques for the author using the platform to write and create their story. While the affordances highlighted what Twine has and can do, limitations provided drawbacks and/or issues with the Twine. The next part will discuss the creative process of Ren'Py by using the same rubric used for Twine in delineating the breakdown according to three taxonomies of Structure, Affordance and Limitations.

3.3 Ren'Py Creative Process

Ren'Py, as briefly discussed in the introduction section, is a visual novel that allows for a graphical and choice-based user interface. Lynch, Charles, Pederson and Hargood, who are authors based in the Creative Technology department in Bournemouth University in UK, extol the capabilities of Ren'Py; they state that it is a visual novel that works as a conduit for a powerful presentation of fictional narratives (Lynch, Charles, Pedersen, & Hargood, 2019, p. 9). Lynch et al. provide some good insights into the creative process of interactive fiction stories utilising Ren'Py by observing that it is integral to focus on the writing and scripting aspects of creating one's project/game/story on Ren'Py. What this unearths is an emphasis on how the writing and the scripting play a fundamental role in presenting the visual elements that deem Ren'Py a visual novel. This emphasis echoes the assertions by Kim et al. who ground the importance of programming the system by being aware of the role that narrative structure (and the scripting language underpinned), authoring tools which comprise of story generators and output interpreters, interface and output media (Kim, Moon, & Han, 2011, p. 221). These components are what I extrapolated from them to form the basis of author tenets. Throughout this section and Section 4, these tenets will be highlighted at key points in the process to shine a magnifying glass about their importance and their ethos.

A breakdown of the creative process will be expounded upon below under the taxonomies of **Structure, Affordances** and **Limitations** based on my interactive

fiction story *Malagwane Ruins Odyssey*. The Structure component analyses the "makeup" of Ren'Py and its composite elements. Affordances will outline the tools and process that are integral to Ren'Py and how it works and the capabilities thereof inherent to the program. Limitations will reveal the frustrations of Ren'Py, from both a systemic perspective and frustrations I encountered during the creative process.

Structure

As briefly outlined above, Ren'Py is created using Python programming language and is thus created in Python as a scripting language and subsequently, the language upon which the Ren'Py framework is based. In Section 2 under the author/creator tenets I have devised using Kim et al. metric of components of the system that form the praxis of a medium, the scripting language is an integral aspect of narrative structure which is fundamental to the operational framework of a storytelling system. According to the Python.org website (n.d), Python is defined as, "an interpreted, interactive, object-oriented programming language. It incorporates modules, exceptions, dynamic typing, very high level dynamic data types, and classes. It supports multiple programming paradigms beyond object-oriented programming, such as procedural and functional programming." Python was designed by Guido van Rossum in 1989 (Severance, 2015). Severance (2015) cites several powerful Python capabilities, such as its easy-to-use appeal, powerful and strong performative capabilities, its extensive applicability in interactive fiction and programming circles, and its popularity as a leading application language in areas of natural language processing and big data.

The first step I took in the creative practice process was downloading Ren'Py to her personal computer. Ren'Py can be downloaded from the Ren'Py website. It is open-source, much like Twine. Open-source software is defined as computer software that is created by the original copyright holder under a particular licence which gives other users the right to modify and use the software freely and for any use (St. Laurent, 2004). This is contrasted by certain software which requires the buyer/user to purchase the licence before use, or to subscribe to the software for use.

Upon launching Ren'Py a screen interface that has many instructions for the creation of the game appears. Figure 18 below shows how the screen interface looks like for the Ren'Py launcher:

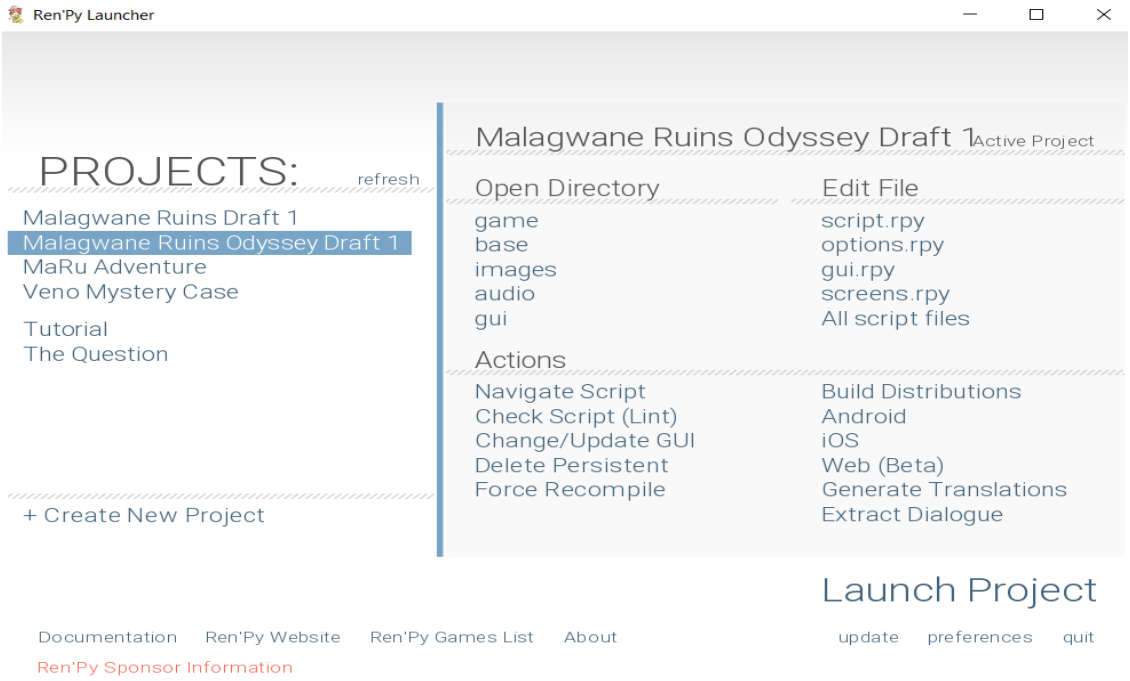


Figure 21: Ren'Py Launcher Interface Screen (Mogale, 2022)

Expounding on Figure 21 above, at the bottom left of the image is an option for creating a new project. Upon creation of a new project, in this case - *Malagwane Ruins Odyssey*, the next step is to access the project editor file. The *Edit File* illustrated at the top right corner is where the author inputs game elements through the *script.rpy* file. The *Open Directory* option next to *Edit File* is the local directory where all the game components can be found. These are stored in a chosen folder to the local personal computer. All images and audio used for *Malagwane Ruins Odyssey* are stored in the images and audios files in the directory. How Ren'Py differs from Twine in this respect is that with Twine, images and audios hosted in an online website repository can be extrapolated using a link and said link can be inserted in the Twine editor. With Ren'Py, all images and audio must be downloaded and stored/saved in their respective labels in a particular game folder, as can be deduced in Figure 21 above. This difference in configuration for both platforms is the central premise of the systemic configuration of authoring tools pointed out in Section 2 that are used to aid the author in creating a story through the configurative design of the system for the platform.

The *script.rpy* input editor plays a vital role. Without it, there would be no game. I utilised the jEdit editor built-in in Ren'Py during the creation process. This editor allows the author to input and define certain elements pertinent to the story game (more on this in affordances category). The input editor is part of the narrative structure, as outlined by Kim et al. An illustration of the jEdit editor depicted by Figure 22 below:

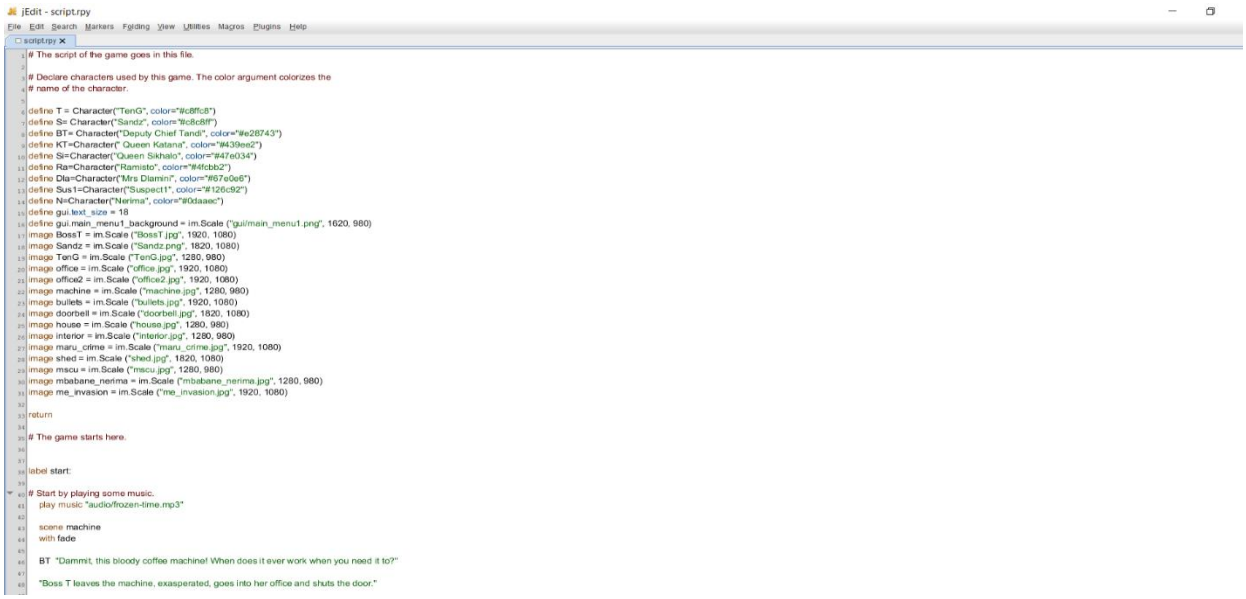


Figure 22: Ren'Py jEdit Editor Utilised for Story Game Input Elements (Mogale, 2022)

On the bottom right of Figure 21 is the Launch Project option. Clicking on this will display the screen below (Figure 23):

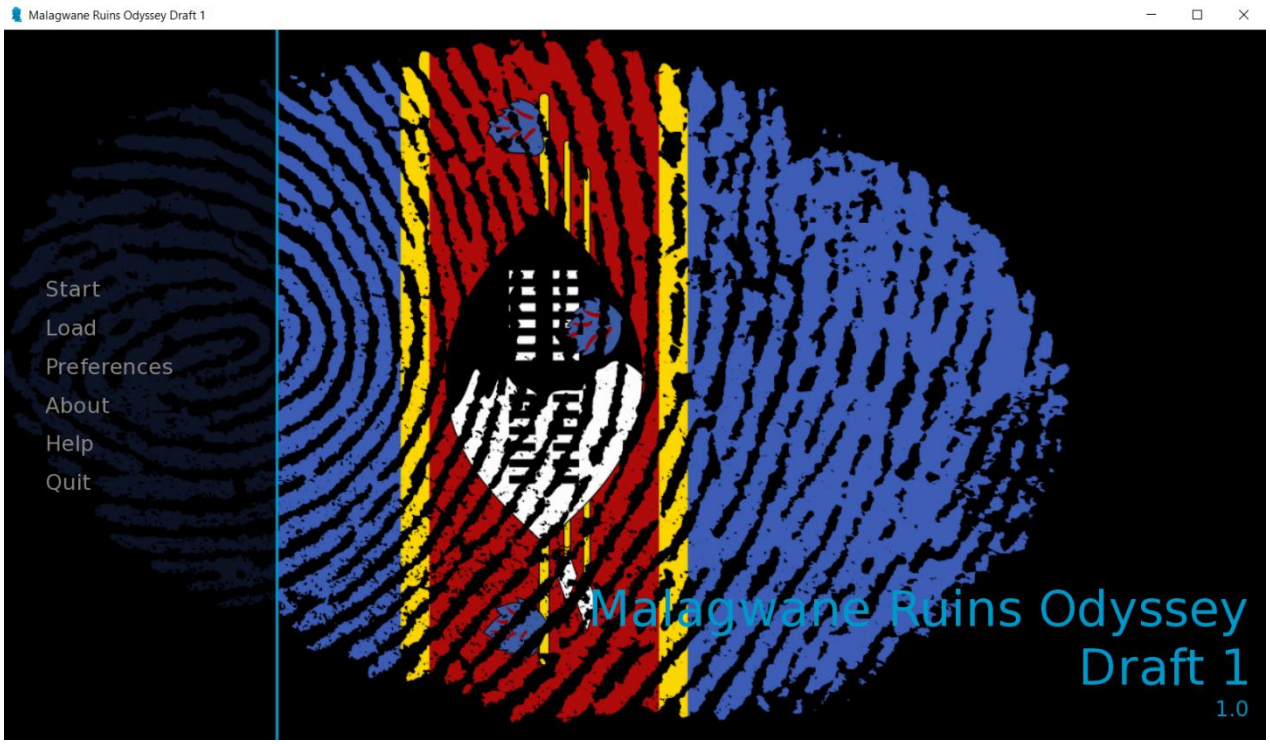


Figure 23: Malagwane Ruins Odyssey Project Menu (Mogale, 2022)

The image background displayed in Figure 23 is not the default image that comes with Ren'Py. I added this component to enhance the aesthetic appeal of the background before game start. By its very nature, a visual novel derives aesthetic appeal through visual components. Adding an image relating to the context of *Malagwane Ruins Odyssey* which is set in Eswatini gives the player/reader even more context that grounds the story through the image.

Affordances

Central to Ren'Pys narrative construction scripting language is the ease with which the story elements are configured. Before the story game can be launched, the parameters of the game must be defined. Key parameters which the platform affords are elements such as defining images. Images are defined according to their labelled image name, size and colour. This is so that it is configured precisely in the game in a visually and aesthetically appealing manner. Other components that require definition are characters. The Ren'Py editor allows for one to define characters by

providing initials designated to a particular name. Refer to Figure 22 for an illustration of *Malagwane Ruins Odyssey* defined images and characters.

Not only are the defined elements for images and characters easy to input, but the platform has an easy-to-understand editor that helps to configure particular story elements in a manner that is easy to instruct.

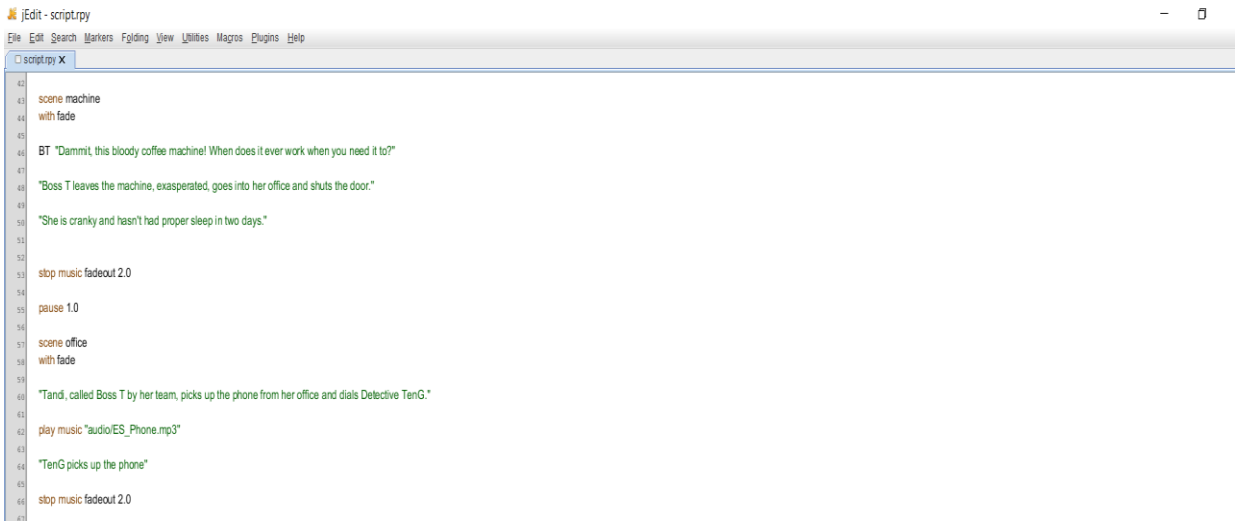


Figure 24: Ren'Py jEdit Backend Story Configuration (Mogale, 2022)

Delving more into the affordance that Ren'Py provides as a tool for interactive storytelling, Figure 24 will be analysed further. What is fascinating is that Ren'Py has taken certain conventions of non-interactive storytelling and applied them to interactive storytelling. The use of scenes to enact distinct parts of stories is a great affordance. This familiarises people with what they know from other types of stories. This is the same affordance that Twine enjoys by using names such as passages to denote various parts of a story.

Extracting from image above, a closer look at the following words and what they represent in the narrative construction of *Malagwane Ruins Odyssey* visual novel:

scene machine

with fade

The scene alluded to above is a scene that speaks to an image labelled 'machine' that was previously defined in the editor before game start. The 'with fade'

component of this instruction means that when the game renders, as soon as the scene ends, the image will fade and another scene will appear after this.

It is key to note that it is important to define the images listed *precisely* in the folder they are saved in and to then define these using the correct name as labelled.

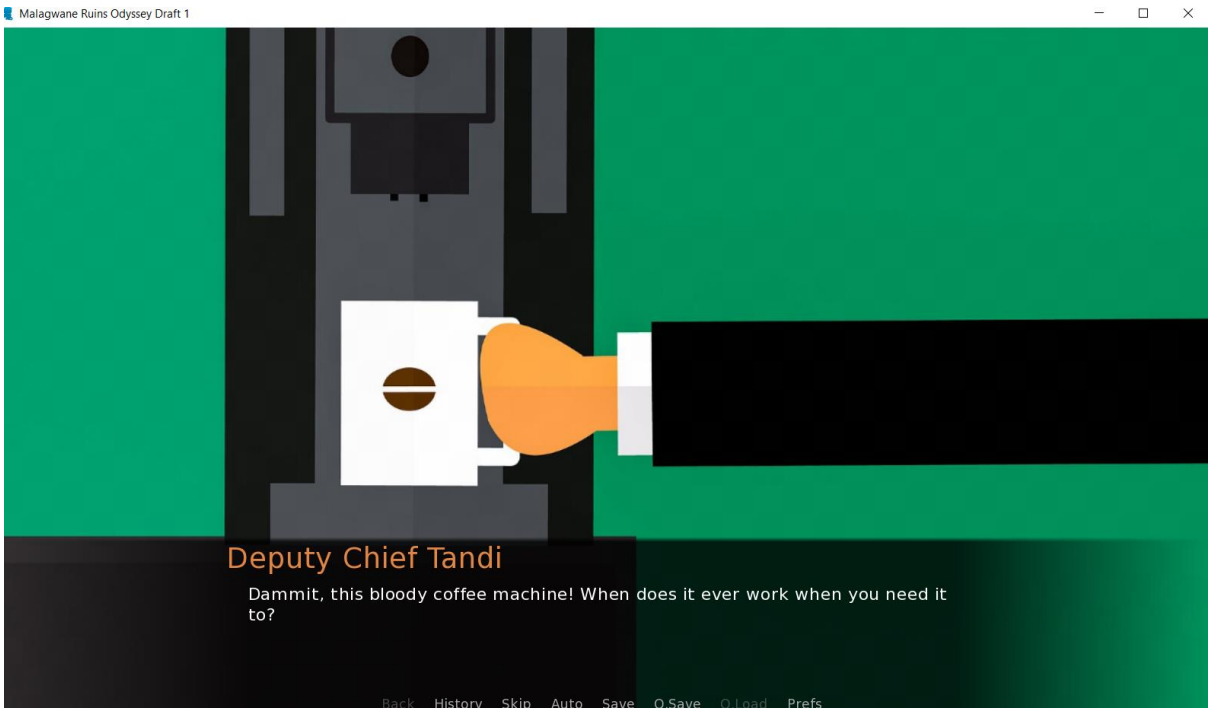


Figure 25: Scene Machine with Fade Visual Appearance (Mogale, 2022)

The image above depicts the visual configuration of the scene defined in the editor. Defining images in the script editor aligns with Mason's concept of mechanical immersion, which provides an immersive experience for the user through the machinations of the system in the affordances its able to bring to the fore in the creative process (Mason, 2013, p. 26). In this respect, images play a huge significant role in Ren'Pys visual storytelling as a conduit through which the user experiences immersion through the mechanics of the game system and through which the author/creator has to be conscious of creating a story that affords the user an immersive experience through the visual aesthetic.

Audio is yet another strong affordance that Ren'Py has in its arsenal. It adds to the immersive experience of the player and creates an enjoyment derived from music

and certain sound effects that are a good accompaniment for text and dialogue. Extracting from Figure 25 above, the following audio element is defined:

play music “audio/ES_Phone.mp3”

“TenG picks up the phone”

stop music fadeout 2.0

Much like the images, audio must be saved and stored in the local game folder (see Figure 21). The instruction is simple and clear that at a particular point in the scene, the audio of a knocking sound will be played and after a certain action is taken, it will stop and fadeout for two seconds before the next part of the scene appears. I found this creative process enjoyable, especially defining the various images and adding sound effects and music to enhance the experience for the user. Ren’Py has in-built components that make transitions between scenes fun and easier to navigate. While creating *Malagwane Ruins Odyssey*, I found that transitions such as fadeout, pause, with fade, added a rich component to the composition of the visual novel. Allegorical to other storytelling conventions is the ability to make transitions between scenes without a jarring effect for the user. Ren’Py allows the author to experiment with these effects and tinker with the time transitions until the story feels natural and seamless instead of cutting abruptly from the previous scene to the next.

Since Ren’Py is dialogue-centric, it is imperative to note that this is a platform that is not too text-heavy. This is something I discovered when making this visual novel and had to tone down on the text-heavy elements and work on fewer but punchier dialogue. The focal point of the immersive experience is in providing decisive action for the characters so that the player enjoys the game without reading too much ‘wall of text.’ In an analogous way, Twine also caters for more action-oriented approaches to creating nonlinear stories. In incorporating dialogue elements during the creative process, I had to be cognisant of Ren’Pys in-built affordance and preponderance towards a more dialogue-centric story between characters.

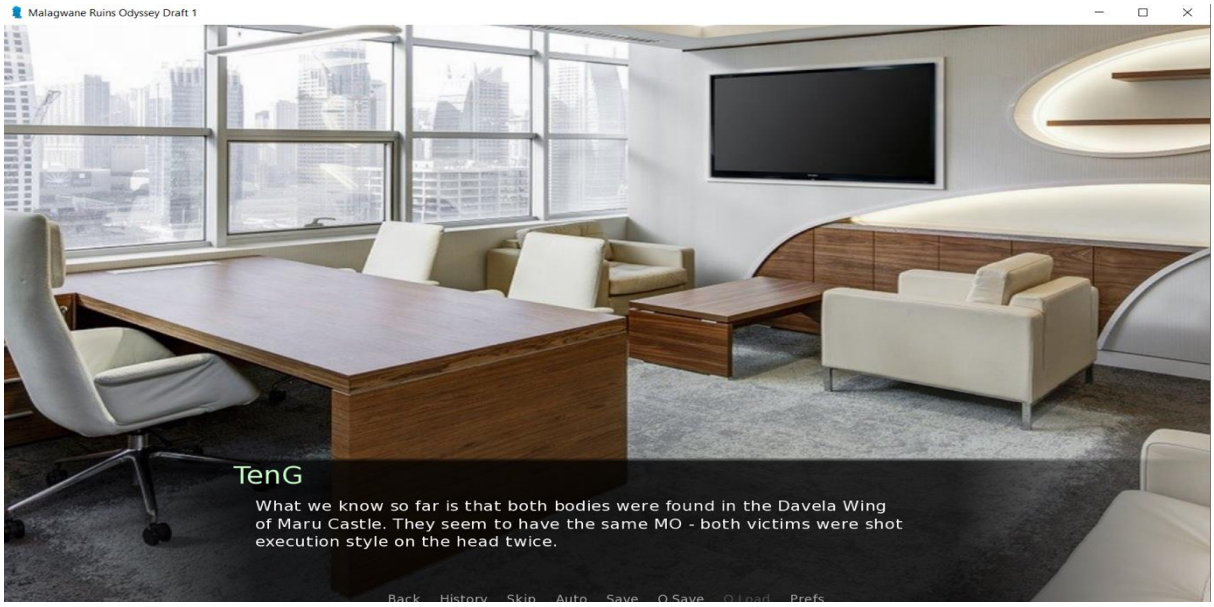


Figure 26: Ren'Py Dialogue-centric Approach to Immersive Storytelling (Mogale, 2022)

As can be deducted from above illustration, the dialogue text box at the bottom of the interface layout does not allow for too much text.

Another affordance that the Ren'Py allows for is for the player to make choices in the game. This provides an interactive immersive experience that gives the player agency in determining which choice they make to proceed to a different part of the story. The visual aesthetic that comes with the choice is appealing and adds to the enjoyment of the story. Figure 27 below demonstrates this:

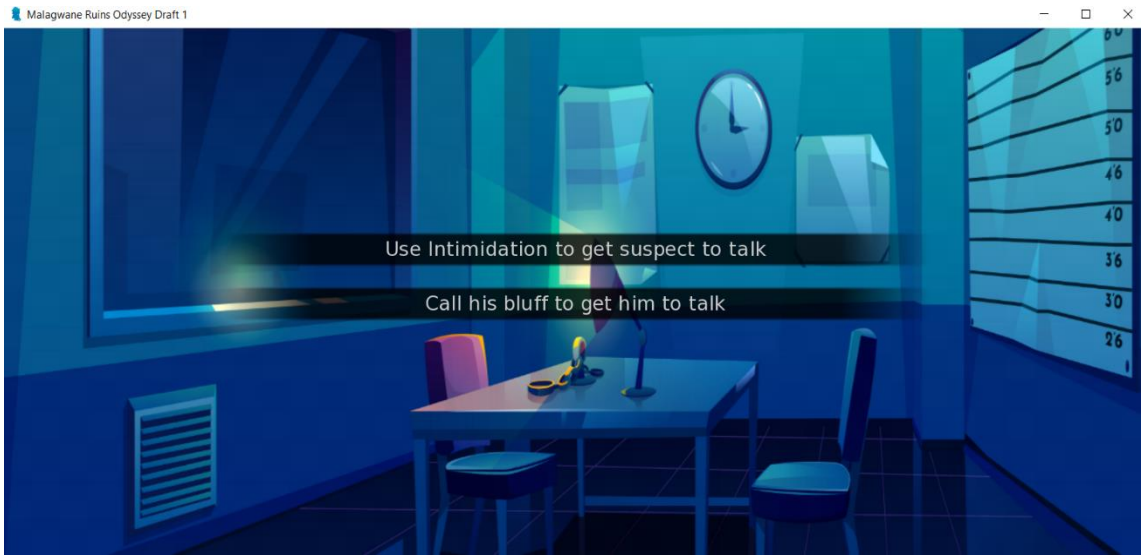


Figure 27: Interactive Choices Add to Player's Immersive & Interactive Experience (Mogale, 2022)

Figure 27 above, depicts a vivid image on an interrogation room setting in Malagwane Special Crimes Unit (MSCU) Headquarters. The setting of this image is deliberate. As the author, I was providing the viewer/player with immersion through visual imagery. When reading the text and following the story, this is the scene where Detective TenG has apprehended a suspect, who she then proceeds to interview (in an adjacent room, Detective Sandz is doing the same thing in a similarly configured room). Much like Twine, I constructed the story in such a way that the player takes on the role of the character – diegetic choice – and embodies the actions of the character. My design thinking process in this scene was for me to get the player/end-user to see themselves as Detective TenG who has to decide how to proceed with interviewing the suspect to extract answers from him, as he is unwilling and reticent in responding. Making the choice to either call his bluff or intimidate him is what provides the end-user with the agency to make a decision that empowers them to take a non-trivial action (see Aarseth's concept of Ergodic Literature in Section 2).

The scene depicted by the image above was constructed using the menu prompt. The utilisation of the word 'menu' is quite telling in how Ren'Py used its language configuration for ease of reference. Figure 28 below demonstrates the creation process behind the final output of Figure 27 above. The shorthand of the words 'intimidation' and 'callbluff' are keywords that were required as a label for noting the particular choice options. The prompt 'jump' denotes jumping to whatever option is chosen by the player. The player can jump to option one or option two. Below that is the actual scene for both menu options. These, much like books, take the player to the particular 'page' of the scene to the exact option they would have chosen.

```
231
232     menu:
233
234         "Use Intimidation to get suspect to talk":
235             jump intimidation
236
237         "Call his bluff to get him to talk":
238             jump  callbluff
239
240 label intimidation:
241
242     "TenG pulls him by the collar of his shirt and looks him in the eye."
243
244     T "Is this what you want, huh, for me to use intimidation to get you to talk."
245
246     "TenG lets go of the collar, circles him and comes back to sit opposite him."
247
248     T "You have blood on your hands. Here you are sitting so smug, you piece of shit. You mean to tell me you were not involved in the recent murders at Maru Castle."
249
250     "He looks at her with a look of defiance and refuses to talk. This tactic doesn't seem to work, so she decides to call his bluff."
251
252 label callbluff:
253
254     "A flash of brilliant comes to TenG and she decides to use it to her advantage."
255
```

Figure 28: Behind-the-scenes Interactive Menu Choice Options (Mogale, 2022)

Another affordance that has been alluded to in this section is that Ren'Py has a great reference document that is easy-to-follow for people with no coding experience. In contrast to Twine's various instructional manuals depending on the story format used, Ren'Py has a much easier instruction manual to follow and it is a singular document that is quicker to grasp for the novice interactive storyteller experimenting with visual novels.

Limitations

One of the most frustrating aspects of Ren'Py I experienced during the creative process was that when certain input elements were input incorrectly, the game did not launch at all, in its stead there would be an error message which would point to where the issue is. If the instructions were not understood, this would mean not being able to fix the error in order to launch an error-free game. This is in stark contrast with Twine because even though one may have certain input errors with Twine, the story itself will still launch sans the incorrect input element. With Ren'Py this means that as long as there are error codes, the game will not launch. The precise nature of python language and certain input codes means that if the author does not render the elements correctly, they won't have a game to display. It is therefore crucial to follow the documentation manual to identify where mistakes were

made. Due to the relative ease with which the instructional reference material have been collated, when errors are identified, it is relatively quick to fix them without too much frustration endured.

In breaking down Ren'Pys creative process, I wanted to bring to focus the importance of the impact that narrative construction and authoring tools have on the final product. Ren'Pys scripting language using python is precise and leaves no room for errors, to the point where if certain input elements are not used correctly in the editor, they will not render the game. Highlighting this for me is important in demonstrating the author tenets that are integral in the creative process, while also being cognisant of the end-user tenets – they are both intertwined in the creative process. The author tenets are crucial to how the author has to use the narrative structure, authoring tools, interface and output media to create an immersive and interactive story for the user. The same author has to be equally aware of how their story would come across to the user to provide an enjoyable immersive, interactive, integrated and impactful story.

The final creative platform is the Interactive Website. I will use the same rubric I have used for both Twine and Ren'Py to break down the creative process below.

3.4 Interactive Website Creative Process

As has been alluded in the introduction section by Techopedia (Updated 2020), a website is a collection of several webpages hosted on a single domain and published in a Hypertext Markup Language (HTML) format. Yamin (2019, p.759) noted that there are over four and a half billion websites. The sheer number of websites hosted vis-à-vis webhosting companies/agencies is staggering and speaks to the high demand of digital technology interface interaction and communication.

My goal in creating *Malagwane Ruins Odyssey* via the website platform was twofold: to firstly generate knowledge production by understanding the creative process, and secondly to derive enjoyment from the creative process and to have a website domain that I plan on maintaining and working on long after the knowledge gained from this research.

In the next sections, I will discuss the structure, affordances and limitations, in much the same format as the first two platforms above and dissect how the website is different/unique and/or similar to the other two.

Structure

I created *Malagwane Ruins Odyssey* on domain name www.maruodyssey.co.za, which is hosted through a hosting company of my choosing – Host Africa. Before delving into the actual creative process, I want to set the context for the website domain environment and its importance in understanding what it is. According to Host Africa – a website hosting company and cloud services provider that hosts domain names, provides hosting services for websites – a domain is the website's address on the internet (Host Africa, 2022). Host Africa (2022) elaborates that the key identifiers of domains is through what is labelled as domain levels. These are seen as website organisers that organise addresses according to their domain levels. "A domain consists of several labels, separated by a dot. Each label points to a level and location within the Domain Name System (DNS), from broad to specific. This helps computers find exact locations of domains."

This is further elaborated upon by denoting levels according to 1st level, 2nd level and 3rd level domains. Domains, as a rule of thumb, are read from right to left, according to their levels. The first level, which is also denoted as top-level domain is the extension of a particular domain name. Figure 29 below will be used to illustrate this properly. The label *Extension* which is the *.co.za* extension for the domain name I used for my creative practice project. This extension is called the top-level domain. The domain name itself (also labelled 2nd level domain) *maruodyssey* is the name I chose for this project for the purpose of knowledge production and reflective research. Domain names and extensions vary for innumerable individuals and entities. The domain name is also the 2nd level domain and the *www* is the 3rd level domain. The 3rd level domain is also marked as a sub-domain. This means that should there be a part of the website for maruodyssey.co.za domain name be allocated to a portion of the website, it could, for instance be allocated as project.maruodyssey.co.za.

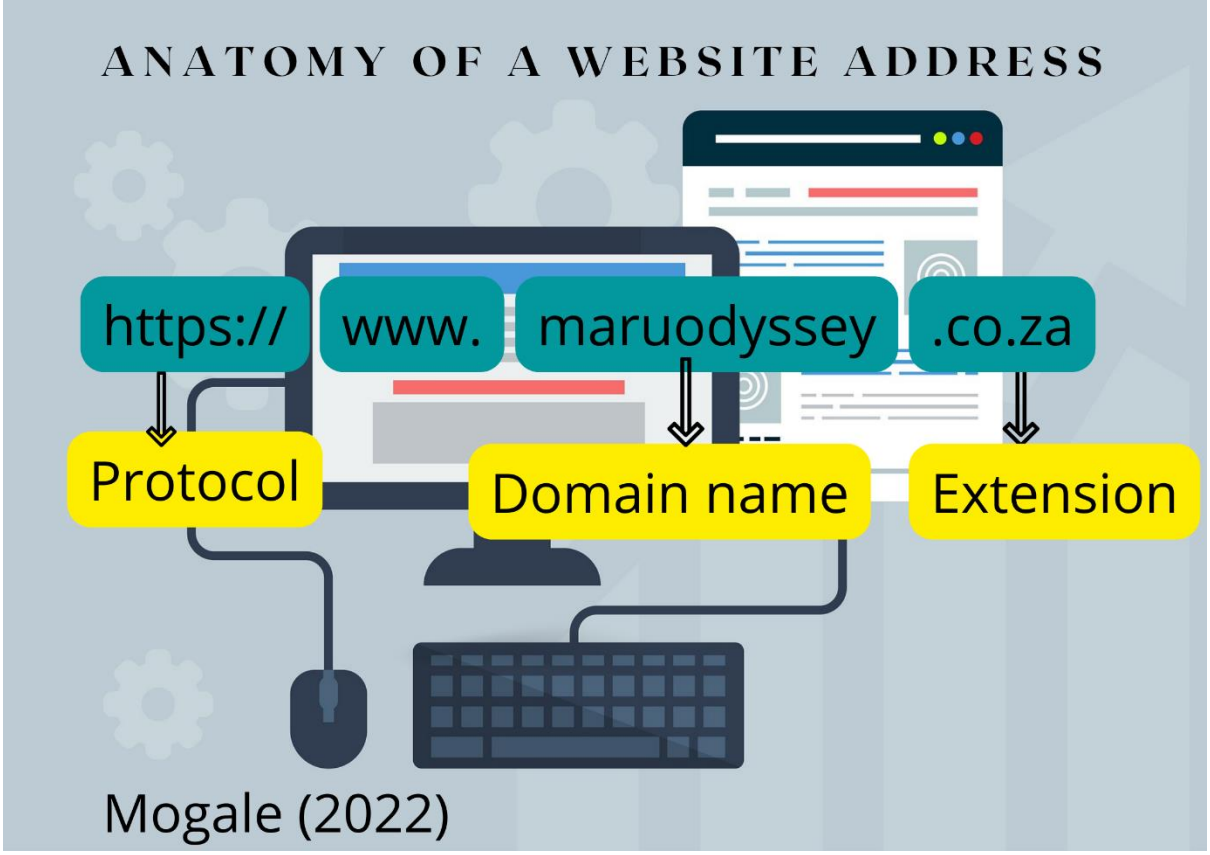


Figure 29: Anatomy of a Website Domain (Mogale, 2022)

One of the fundamental aspects of domains and websites is that a website cannot be live unless there is a registered domain for a particular website. Therefore, the first step in the website design and creation process is to first obtain a domain name and domain hosting services with a webhosting entity. Once the domain hosting company has processed the domain, it has to go through a propagation period before it is live. A propagation period entails the domain being registered properly through the entity's server systems and once it is live, it can then be used for the next step, which is website design step.

Upon the domain name being live, the hosting entity provides a control panel account where the owner of the domain is able to handle all requests related to that domain. It is referred to as the short-hand cPanel. A cPanel is an intuitive web management and server platform that controls the administrative aspects of website and server management, from creating email addresses and websites, to handling server side hosting for companies and web hosting agencies (WPBeginner, 2020). The cPanel has ample software programs on its interface that can be used, and one can install the programs one requires. Part of the software programs that go with the

cPanel is WordPress. I will delve into WordPress in more detail in the next sections; affordances and limitations, as a basis from which I created my website creative practice project *Malagwane Ruins Odyssey*.

Now that I have set the groundwork in understanding the process of how a domain name is set up, I will analyse the creative process through the WordPress Content Management system below. It was vital for me to set the scene for the reader so that there is an understanding of the landscape before getting to the “meaty” parts of the next sections.

Affordances

For creating my story *Malagwane Ruins Odyssey*, I have used the WordPress Content Management System as a platform. WordPress is an open-source Content Management System (CMS) personal publishing system platform that was founded by Matt Mullenweg and Mike Little in 2003. It boasts more than 43% of users worldwide who use WordPress CMS for website management (WordPress.org, n.d.). Before delving deeper into the affordances of WordPress vis-à-vis *Malagwane Ruins Odyssey* and how I inculcated the investigative adventure story through WordPress CMS, it is imperative to shine the spotlight into other competing content management systems of choice that can be utilised for both commercial and personal use.

Other content management systems besides WordPress are systems such as Joomla, Drupal, Wix, Square Space and Shopify. Much like WordPress, these management systems afford the users administrative and website building functionalities and capabilities.

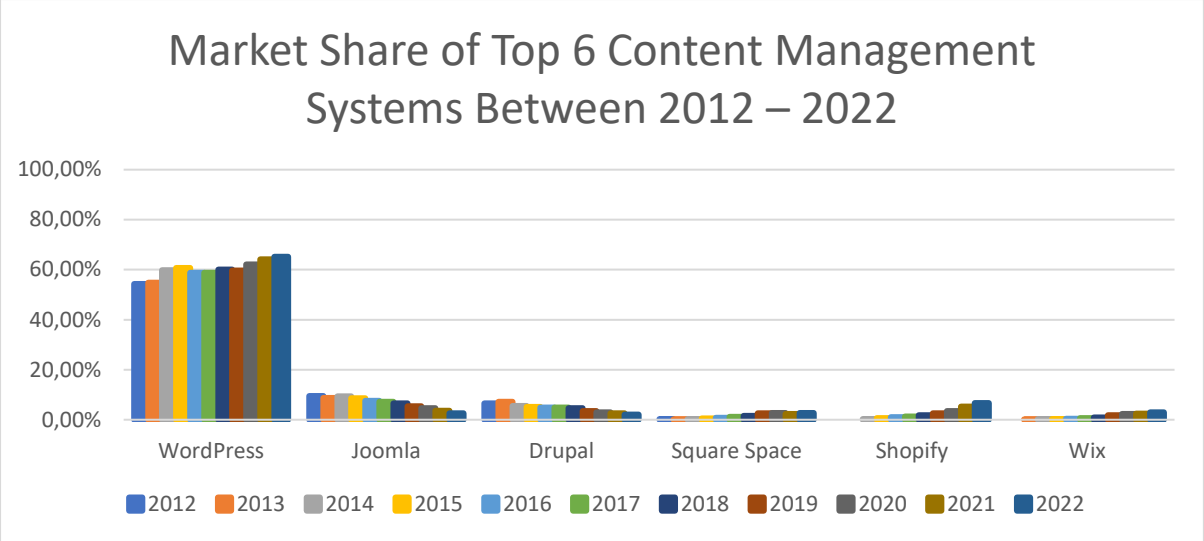


Figure 30: Market Share of Top 6 Content Management Systems Between 2012 – 2022 (Mogale, 2022 – Inspired by Wibowo 2021, tooltester.com) (Wibowo, 2021)

Figure 30 above was inspired by Wiboro (2021) who compiled a tabulated format of top 10 content management systems from 2010 until 2022. I extrapolated information pertinent to the CMS she wanted to highlight for the purposes of highlighting market share in some of the popular CMS platforms to ascertain market share in a ten year period between 2012 and 2022. Wiboro (2021) extrapolated data for January each year. Pertinent to the chart above, it is evident that WordPress takes the lion's share of the market, with 65.2% as at January 2022.

Miller (2021) from Creative Minds extrapolated the summary of latest market share with the image below.

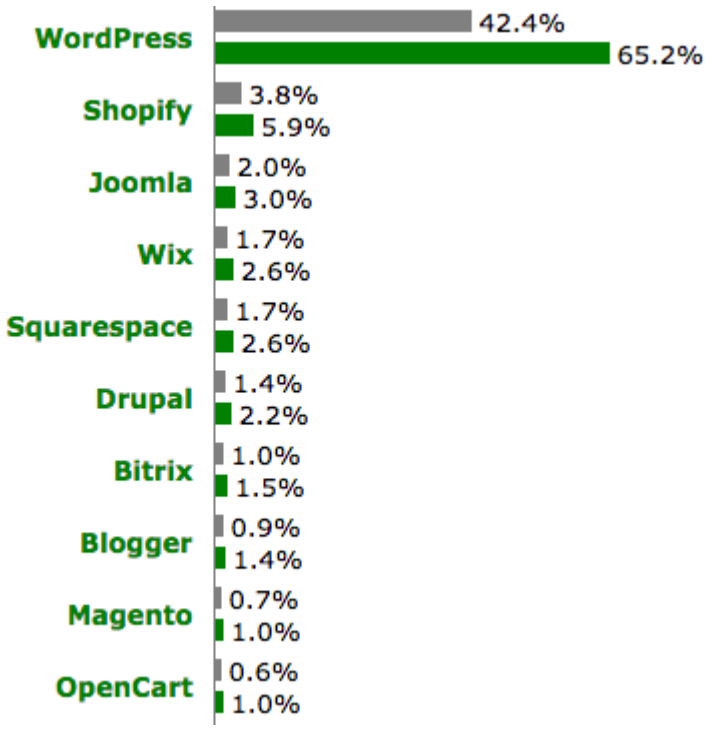


Figure 31: Top 10 Content Management Systems by Market Share (Miller, 2021)

The illustration above depicts the market share percent in green while the grey is a depiction of the percentage of users for the content management platforms above. The pervading consensus from both illustrations above (Figures 31 and 32, respectively) is that inadvertently, this speaks to the popularity of WordPress as a website content management system of choice. Why WordPress?

One pertinent affordance that website CMS platforms are popularly known for is the ease with which websites can be built in a matter of minutes without the steep heel of learning how to code (Wiboro, 2021). This affordance has, over the years, made WordPress especially the platform of choice as it has developed a wide range of repositories of themes, plugins and other functionality elements.

To revert back to the creative process for *Malagwane Ruins Odyssey*, the next step after obtaining a domain name (as alluded to at the beginning of 3.4) is building the website. WordPress has an admin dashboard which functions as the backend of the website where the administrator can make changes pertinent to the website.

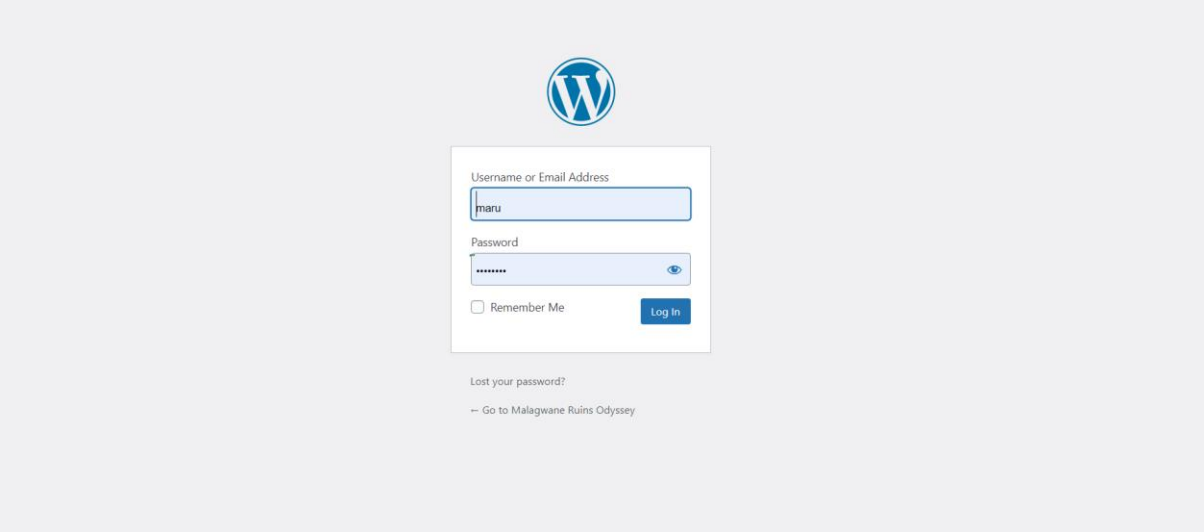


Figure 32: Admin Login Area for *Malagwane Ruins Odyssey* (Mogale, 2022)

Figure 32 above is the access area for logging into the administration dashboard. It was accessed through www.maruodyssey.co.za/wp-admin. The *wp-admin* is a WordPress extension that, when clicked upon, results in the image above. This would be similar for any other domain that would have been properly propagated and available for use – relevant domain name, followed by the *wp-admin* extension. The admin panel is the back-end of a website. Conversely, the front-end of a website is the part that users see and interact with.

It must be noted that Twine and Ren'Py do not have the same requirement for the author/creator to have to login or use an administrative panel to create a story. This narrative structure is unique to the website platform and medium.

Figure 33 below depicts the dashboard panel for *Malagwane Ruins Odyssey* after logging into the admin panel. The dashboard panel is the back-end interface of the website through which input elements are viewed by the author during the creative process.

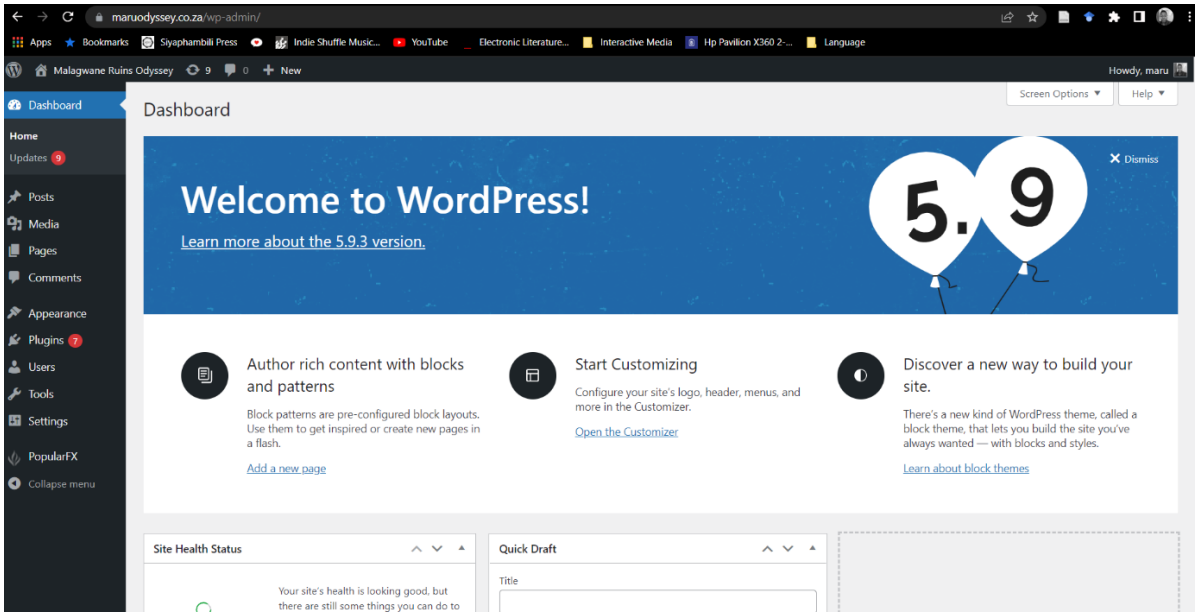


Figure 33: WordPress Dashboard Panel for *Malagwane Ruins Odyssey* (Mogale, 2022)

On the left side of the dashboard panel are different feature options such as *Posts, Media, Appearance, Settings.* These labelled features are integral to the construction of a website in the admin panel. Some of these will be discussed further below.

Posts

Mullenweg and Little's mission in creating WordPress was to "democratize publishing" and coined the corresponding slogan "The freedom to build. The freedom to change. The freedom to share." (WordPress.org, n.d.). This rather bold and audacious slogan is the backbone of WordPress. In comes in *Posts*. This feature provides the option to post content onto a particular webpage, typically a blog page, but can also be categorized accordingly, depending on the needs of the brand or website utilisation purpose. I did not need to use this feature in my project *Malagwane Ruins Odyssey*, but chose to use Pages instead, as that was more relevant to the type of story I created.

Media

An important part of website design is media. Media that can be uploaded on WordPress admin panel include images, sound effects, documents. Media form an integral component of interactive storytelling. Through using the media library, I wanted to experiment with the kind of media I could use for my story and discover

which of the media outputs I could use successfully in the creative process, and which media I could forgo. Media is stored in what is called a media library in the admin repository. Figure 34 below depicts the media library for *Malagwane Ruins Odyssey.*

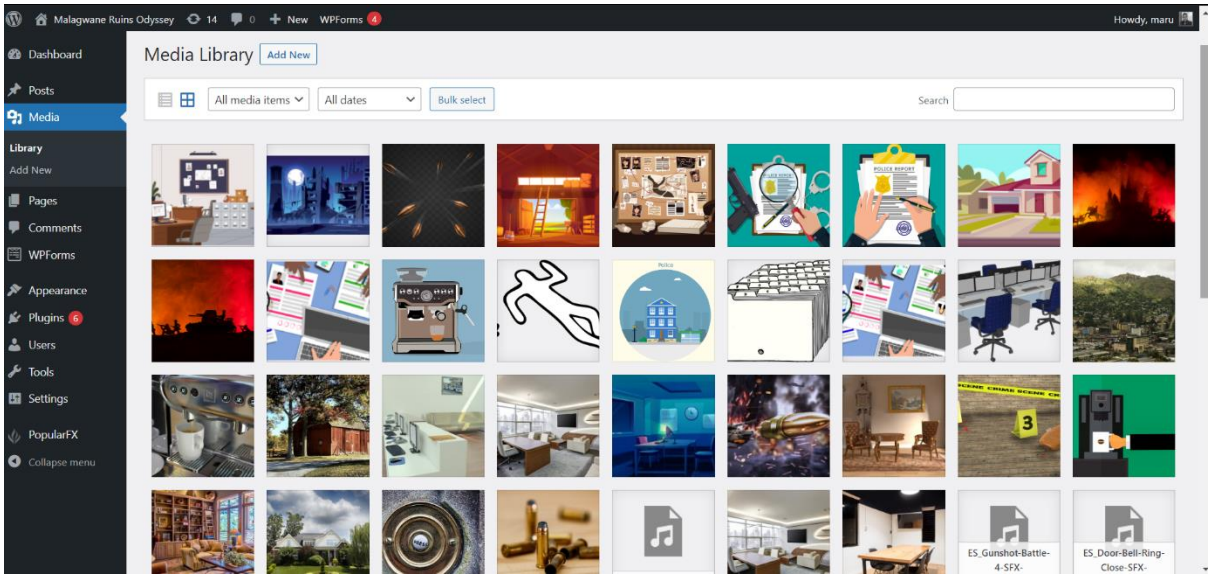


Figure 34: Media Library Contents for *Malagwane Ruins Odyssey* Repository (Mogale, 2022)

A beautiful, aesthetically appealing website would be remiss without media. Integral to the concept of aesthetic appeal for the user is a concept of User Interface (UI) – which is its own career field that tackles the interactivity of the user with the interface they come across. A website provides this affordance of integrating media into its interface, with the intent to communicate and attract the user/interactor with compelling aesthetics to draw them in. It can be said, with a hint of hubris and arrogance, that media forms the backbone of the front-end interface of the end-user. In Section 2, end-user tenets were discussed in detail. Part of appealing to the end-user is attracting them to your website. Part of the creative process for me that was compelling was incorporating design elements that would catch the eye of the end-user. More on the breakdown and reflection of creative process will be discussed in Section 4.

Pages

What is fascinating about websites is that what is called *Pages* by WordPress (and other CMS using a similar model) is reminiscent of pages of books. In fact, it is quite

stark that the arrival of digital mediums and platforms could be traced from more traditional forms of media formats such as print books, but suitably mediated on a digital screen and adjusted for digital interfaces. Pages can therefore correctly be designated as the digital version counterpart of pages from books. They too, like book pages, form the function of delineating various parts of the website and categorising them according to certain components and functions. A perfect illustration of this is Figure 35 below which illustrates the webpages for the creative project.

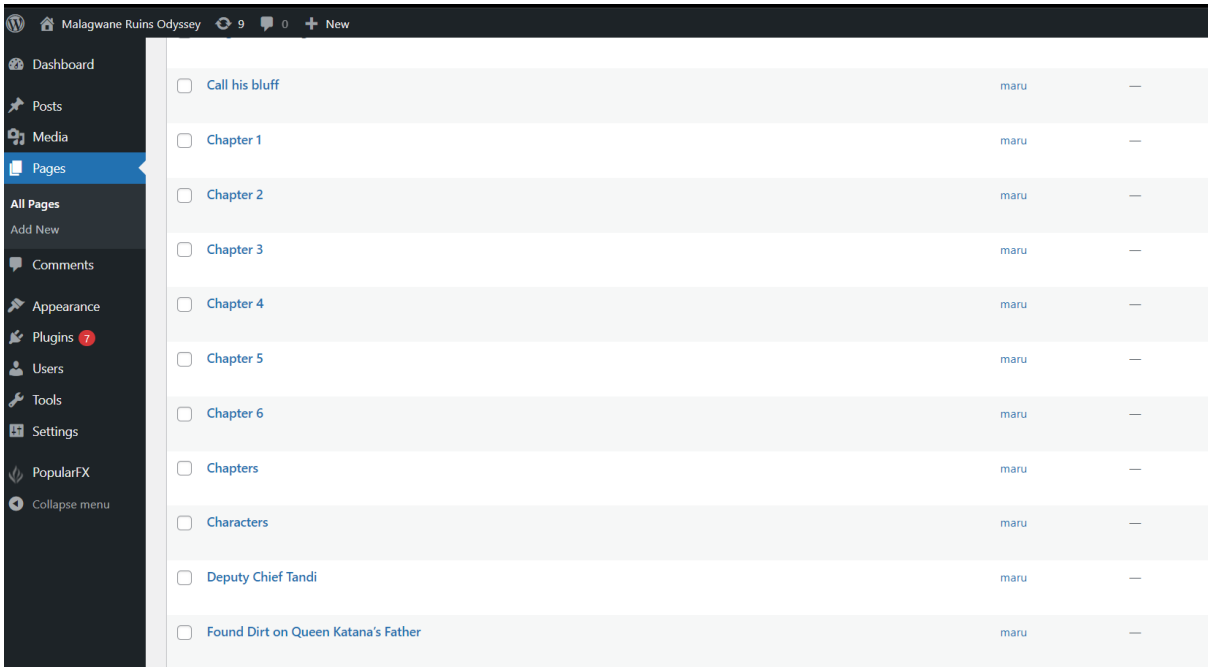


Figure 35: Pages Dashboard Depicting Different Webpages (Mogale, 2022)

The figure above is the backend version of the pages created. These pages are then displayed into a menu to collate the different pages together and then displayed on the front-end of the website where the users interact with the pages and menu displayed. It is important to note that not all pages that are created on the backend of the website are shown on the menu of the front-end side of the website. This is a direct correlation with the messaging and intent of the creator/author who makes deliberate decisions about what can and cannot be part of the final product. Final product for the pages displayed on the website can be seen in Figure 36 below:

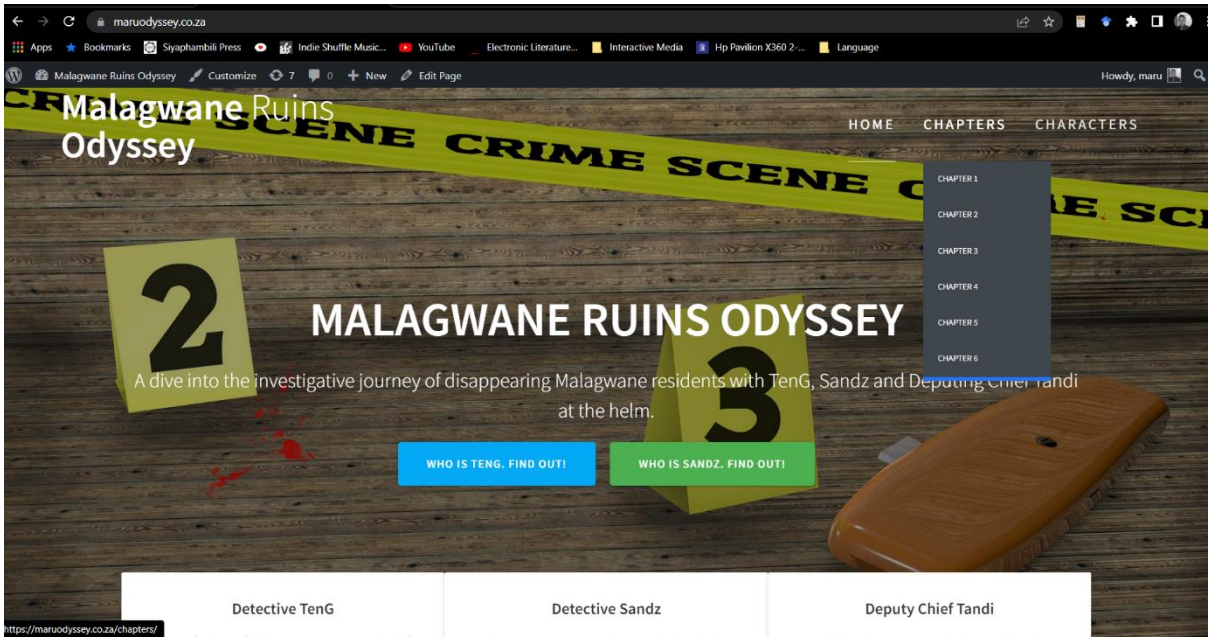


Figure 36: Front-end Pages Displayed in Menu Header (Mogale, 2022)

The pages appear in the form of a menu at the top right of the website with the menu presentation of Home, Chapters, Characters. The dropdown menu displays the chapters of the story – these are the different pages created in the back-end, that when clicked upon, direct the user to the designated chapter. Clicking to different pages is essentially linking, which I discussed in Section 2 when bringing the concept of hypertext language from the author Mark Bernstein who coined the term Hypertext Rhetoric, which he described as “the study of effective expression in interlinked media.” The very nature of website pages and links is in the navigational pattern of websites. To navigate from my page to another, links are essential.

Appearance

The most apt way to describe *Appearances* is to think of it as akin to appearances in any form that speak to ‘how’ a particular component looks like. Contextually, this feature in WordPress integrates components such as themes, widgets and customisation. Figure 37 below highlights the key features of *Appearances* (highlighted in blue).

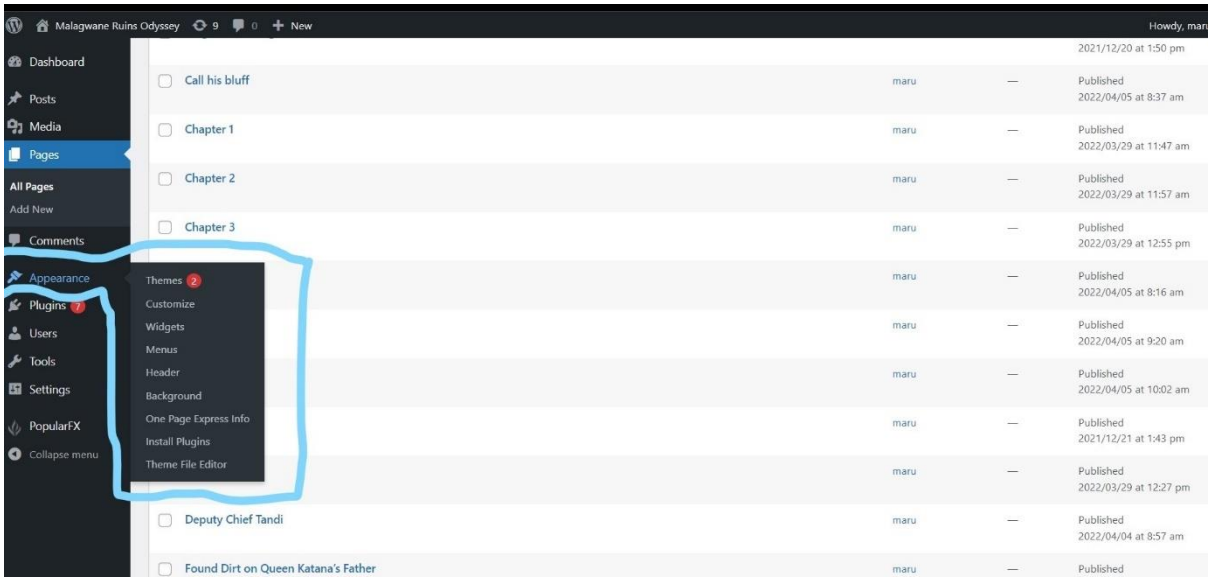


Figure 37: Components of Appearance Section of Admin Dashboard (Mogale, 2022)

Without getting bogged down into too much detail that would entail its own entire study and dissertation, some of the components will be explained for better understanding. The component *Themes* is integral to the creative process. Choosing a theme is important in the website design and creative process. Different themes and their composite elements provide different capabilities that must be taken into account when choosing which theme to use for the website design process. Some themes, for instance, provide capabilities such as e-commerce, while others do not. Taking into cognisance the goals and objectives of the website, looking for the correct theme is important. In creating the story, my goal was to choose a theme that would focus on the aesthetic appeal of the website while also looking for a theme that would provide an affordance for components that would be reminiscent of book chapters, with this replicated in digital format.

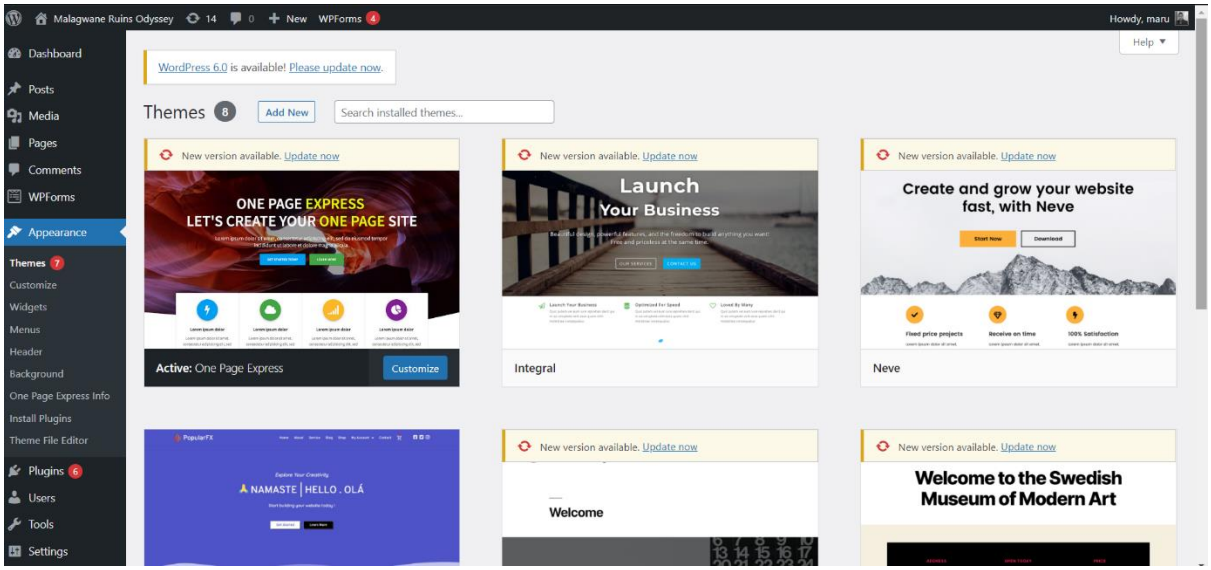


Figure 38: Themes Dashboard Panel (Mogale, 2022)

The image above depicts an active theme One Page Press. This is the theme that can be customized by adding components the designer deems important for the website content. This segues into the next component, *Customize*.

Customize

Customization, as the term implies, provides an affordance to chop and change the aesthetics and functionality of certain components in the website. The best way to depict this is to illustrate through images.



Figure 39: Customize Back-end Website Feature (Mogale, 2022)

On the left side of the image about, highlighted in blue, are two key components – the first being the theme chosen for the website, and the second being key composite elements that assist in changing different elements of the site. For instance, Header deals with the top page of a website – the header deals with components such as placement, colour, typography, etc. Components such as colour and typography are dealt with differently in Ren'Py and Twine. The former integrates these in the jEdit back-end editor as part of python scripting language and does this in a singular editor. The latter deals with styling components such as colour and typography in a stylesheet called CSS (discussed in Twine section).

Different themes will have different components displayed in the customization feature, some more and some less than others. Other features in this section are features such as Footer, General Settings, Menu, etc. The main purpose of *Customize*, to reiterate, is to make changes to certain features by adding or taking out components to suit the end result of the design. It should be noted that the features provided by that particular theme are restricted by the theme – this can be seen as a constraint within the affordance of the theme. The systemic constraint and affordance has been mentioned by Mason as mechanical immersion. More savvy developers who have coding knowledge can add more code to the theme to add elements that were not integrated by the original theme designers.

Other features on the dashboard panel comprise elements such as Plugins and Settings. The former can be defined as software programs that are integrated into the website to add to the functionality of sites. For instance, WPForms plugin is a program that allows the creation of various kinds of contact forms, from a simple contact form to an appointment specific contact form, etc. The latter deals with components such as setting into place how website pages can be shown. For instance, for websites that have active blog sections, part of settings would be to show excerpts instead of the whole blog article. Other components of settings deal with links, time, date, media, privacy, etc.

To reiterate the affordances that interactive website provides, the platform provides for non-code designers and creators to design a website within minutes without the steep heel of learning how to code. The platform, through the admin panel, integrates certain elements that make it easier for the novice to design an

aesthetically appealing and responsive website without needing to know how to code.

Limitations

Having discussed the affordances above, they are not without limitations. The most important limitation is that websites are online platforms that are hosted on digital servers, i.e., they cannot be viewed offline in real time. Users who do not have data and Wi-Fi access would not be able to view websites online, unless they had bookmarked them on particular web browsers such as Chrome, Opera Mini, Mozilla Firefox. To access information in real time would require a user to be online and to have data and/or Wi-Fi connection. This imposes a limitation to users who cannot afford to access these services.

Another limitation is that to have a domain name, it has to be hosted by a webhosting provider. This often means having to make monthly instalments for the upkeep of the domain and hosting services. This poses an affordability issue. This, admittedly, is not a limitation of the medium and platform itself, but rather one that constitutes a barrier to entry for people who would otherwise have a thriving website presence, but due to affordability issues, are cut out of the value chain. Having said this, WordPress offers a free version where creators can create a free website, albeit with a downside that the website domain extension ends with *.wordpress* and that does not bode well with a brand name that would be taken seriously for professional endeavours.

A steep curve that speaks directly to the platform itself is that sometimes it is impossible for a theme to provide all that is required for a website to function to its fullest potential. Some of this work requires developer knowledge and can be a steep curve for someone who has no coding knowledge. They would be stumped about how to proceed and this can be an obstacle to the design process. For instance, the theme I chose could not properly optimise audio effects. I had wanted to have sound effects in different and relevant parts of the story so the user can derive enjoyment from hearing the audio in real-time as they interact with my story. Unfortunately, I could not make this happen in the same way I was able to render this on Twine and

Ren'Py. I then had to make the choice to make my story interactive but text and image-based only, without sound. The reason I decided to take out sound effects altogether was because there was no seamless integration of the components of text, image and sound. You can add sound effects as an audio on a webpage, but I got frustrated when I did this because it did not feel seamless and it broke the immersive experience I was trying to build. It was not like in Twine and Ren'Py where the sound functionality is inbuilt in the program by issuing certain input commands in the script editor at relevant points in the game. In the website, the audio stands awkwardly as a standalone component that doesn't provide the player with a real-time experience of the sound playing when gunshots are heard or a song is played, for instance.

Yet another steep curve for learning is imposed in situations where one has to understand the compatibility of plugins and how these can affect the website if installed and they don't work together. I have experienced this in other past website design projects whereby what is called the *White Screen of Death* can occur where the incompatibilities of plugins and themes interfere with the seamless running of the programs on the website and server. The *White Screen of Death* is an HTTP 500 error page that appears on the website that signals an issue with incompatibilities with the website theme or plugin. For instance, if a particular WordPress version is not compatible with a plugin that was installed, it will not render this properly, and therefore not show the website. Not having this knowledge can induce frustration and helplessness in solving the issues. Of course, there is always respite, and Google has, over the years, proven to be a powerful search engine that provides the answers to how to tackle issues encountered.

Key Takeaways

After much reflection on the creative process, I believe I could have presented the stories better, especially as pertains to the lack of more diegetic choices in the story world. Even though I stand by the fact that providing limited diegetic choices was by design in this instance, this is a step I would do differently in future projects of this nature to employ more nuance and even more immersion and interactivity in the stories to draw the user in. I realised that it is crucial for interactive stories to provide

a deeper immersive experience for the user as part of what Roth and Koenitz (2016) define as Eudaimonic Appreciation, which speaks to the aesthetic visual and auditory presentation of a narrative. The aesthetics of the story world play a huge role in drawing in the user to be engrossed in the world they are thrust in. Part of the aesthetic experience is the links/nodes that users click to advance to the next part of the story. I could have employed a great deal more agency and complicated choices to provide more enjoyment and depth to my stories. With more experience as time goes, I will be able to construct and frame my interactive stories better.

Another key takeaway from my creative process is realising that what you as the author deem understandable and easy-to-follow may not necessarily translate to the user/player/reader. This means being as clear as possible with the plot of the story and the story progression without confusing the user. This is admittedly an area of the creative process that need more work and that I will be cognisant of going forward.

On a more generic analytical standpoint, I fully acknowledge that there are components of the three platforms that I could have explored better and with more depth. For future projects in this area of study, I will focus on less of the technical aspects of the creative process which sought to ground the system configurations of the three platforms, and more on the characters of the story and the storyworld and the relationship between form and content of the platforms.

The creative process was a very enriching experience that played into the two sets of core tenets in different ways for the three platforms. During the overarching process, I had to be aware at all times that I was incorporating the elements embodied by the core tenets and how they play a role in the chosen platforms. In the next section – Section 4 – I will discuss in detail the role the core tenets played and their prioritisation by each platform through reflecting on the creative process. I will then end with the lessons learned.

SECTION 4: REFLECTION/SYNTHESIS

The premise of creating three interactive fiction pieces and outlining the creative process of *Malagwane Ruins Odyssey* on Twine, Ren'Py and Interactive website was, over and above analysing the platforms and mediums of their own accord while backed by core tenets – end-user and author/creator tenets – to reflect on the creative process by bringing to the fore components that affected and influenced the creative process for each platform.

The rest of the section below will bring these components to focus and reflect on the project as a whole throughout the process and how certain affordances and tenets impacted the creating/making of the stories on these platforms. Key to this is highlighting how each of the tenets were prioritised by the platforms and merge this with the theoretical grounding from Section 2.

4.1 Reflective Analysis of End-User Tenets

The grounding of the research is informed by the end-user tenets by Heyes as deduced from Section 2 – Immersion, Interactivity, Integration and Impact. To reiterate the tenets, Heyes defines immersion as the depth of the story and the senses it evokes. Integration speaks to the incorporation of stories across multiple platforms using different devices, for instance experiencing the same story on mobile, laptop and personal desktop. Interactivity explores the level of engagement the user has with a particular story and the degree to which they influence the trajectory of the story through the concept of agency, which is the ability and power of the user to take certain actions within the narrative to drive the action of the story forward. Impact is derived from the emotive affect and effect that influences how a user reacts and responds to a story.

The next components in this section will deal with the process of these end-user tenets for all three platforms – Twine, Ren'Py and Interactive Website – and how

these tenets were applied in each for the creative process and reflections thereof throughout the process.

Twine

Twine, as a tool for creating nonlinear interactive stories (in this context, fiction nonlinear story), has proven to be quite a nifty tool for bringing to life stories with visuals such as images, written text and aural sound effects. Before delving into the reflecting process of the creative practice by inculcating the end-user tenets, it is pertinent to outline the importance of the factors that influence how a user interacts with a story. Riedl & Bulitko (2013, p.67) posit that the user interacting with a story is influenced by three key aspects; *assuming the role of the character in a fictional world, issuing commands to computer-controlled characters* and *directly manipulating the fictional world states.* These factors can be applied to some degree for Twine, and in analysing this process, this will be taken into account.

Immersion is underpinned by the degree in which a user is engrossed in a simulated world. I had to take this into account when creating *Malagwane Ruins Odyssey* on Twine and curate a memorable immersive experience. Pertinent to this was understanding the integral components of the medium and how it can be used to maximise the immersive experience. In tandem with this, was being acquainted with Mason's concept of two types of immersion she mentions – narrative immersion and mechanical immersion (these have been explained in Section 2).

The initial draft of *Maru Odyssey* (*Malagwane Ruins Odyssey*) comprised of walls and walls of text, that upon further chopping and changing, had to change to accommodate the investigative nature of the piece and the action-oriented nature of Twine that focuses more on giving the interactor more actions to take and less text to read, while providing links as a conduit for navigating to the next passage of the story. An excerpt of the initial draft with walls of text is depicted in the two images below:

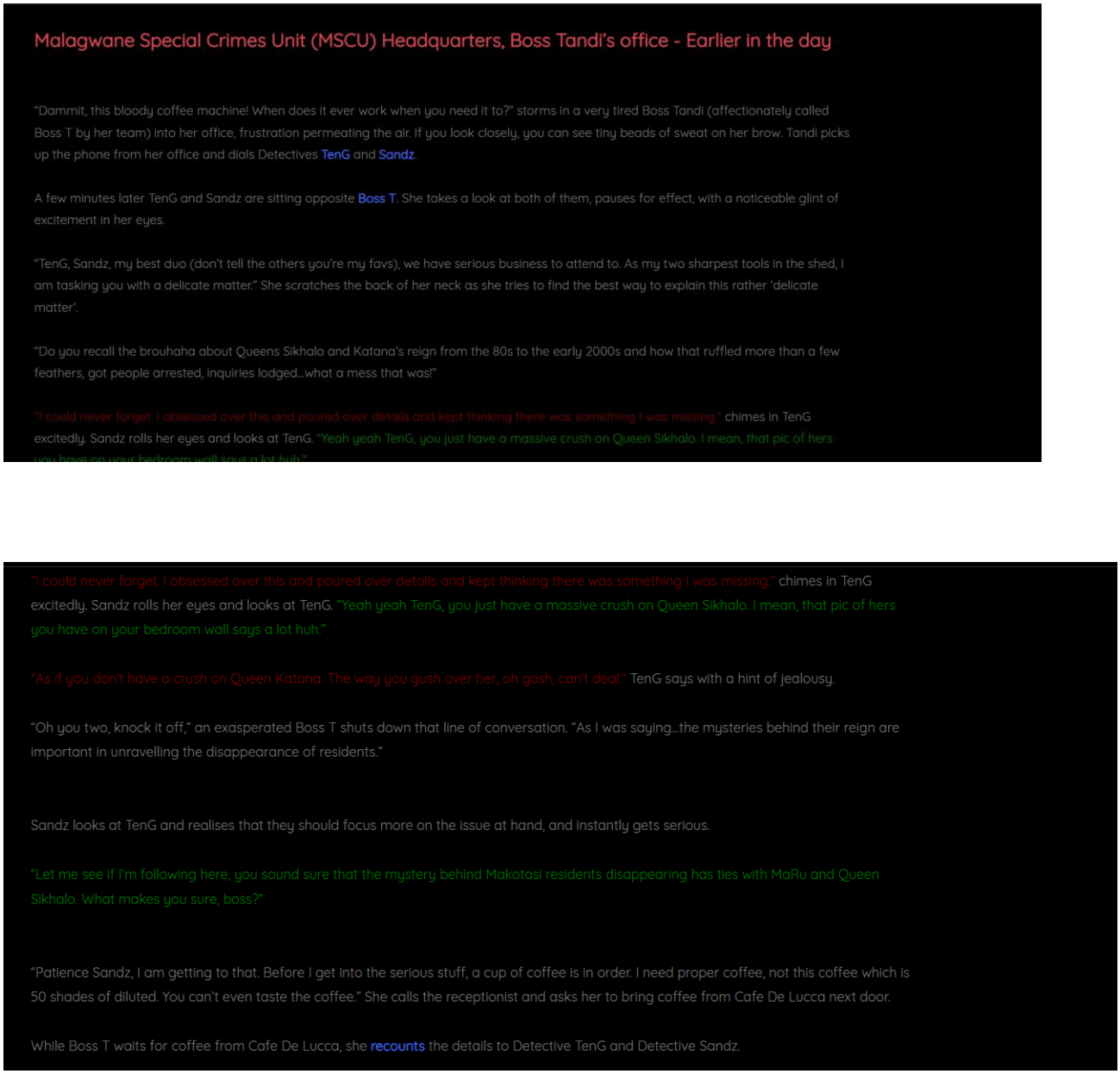


Figure 40: First Draft Iteration of Maru Odyssey (Mogale, 2021)

The first iterations of this showed very little action and a whole lot more text. Upon reflection and through amending to this other subsequent drafts, the story was whittled down to fewer text elements and more action-oriented text that was directive and intentional in driving the story forward. During the creative process, I realised that I had over-scoped and had to change some elements of the story by focusing on fewer key elements with fewer characters instead of having a larger-than-life story with several characters. This decision proved to be better as it enabled me to concentrate on the immersive elements of few key characters TenG, Sandz and Deputy Chief Tandi. For Twine, particularly, this meant that the medium allowed me

to focus on the action of TenG, Sandz, and Deputy Chief Tandi, as they navigated the investigations and less on extensive text explaining information that wasn't pertinent to the story for this particular medium. Twine is action-oriented as a medium and allows for punchier and more succinct but descriptive text. Being aware of this after the initial drafts, I focused on narrative immersion oriented around the actions of the characters and how these influence the story forward. For instance, Detectives TenG and Sandz going to Maru Castle to investigate the murders of two residents from Makotasi was a catalyst for the pace of the story.

Part of incorporating immersion in the story as an investigative story was profiling the main characters to mimic the nature of police stations in how they profile criminals and suspects. This was provided in the form of providing a brief profile of each main character and a tabulated form that gives more insight into who they are. Going back to Riedl and Bulitko (2013) who outline key factors that influence interactivity in a story, I took into account Riedl and Bulitko's (2013) factor "*assuming the role of the character in a fictional world*" when profiling the characters for users to immerse themselves in the characters and identify themselves in the characters. Figures 41–43 below depict profiles of TenG, Sandz and Deputy Chief Tandi, respectively.



Known for her affable persona, TenG is the 'life of the party' and can talk your ear off. Someone's gotta oil the wheels of conversation and lubricate the tension awkward-inducing moments. This 35-year-old has seen it all. Working as detective for Malagwane Special Crimes Unit (MSCU) for 5 years has exposed her to the good, the bad and the ugly of humanity. How she still keeps her optimism badge is beyond Sandz, who, as her partner both at work and in life, has developed a much more cynical view of life.

Coming back to her hometown after years of studying and working abroad in cities such as New York, Berlin and London, to work for MSCU, she has developed a robust worldview that shapes how she processes the world around her and has been instrumental in her success as a detective for MSCU. Her middle class upbriging from a conservative family made her purge some of the restrictive stereotypes that were pervasive while growing up in Makotasi.

Years later after coming back to Makotasi, she is pleasantly suprised by how much has changed, and for the better.

Name	*Tengetile aka TenG*
Ethnicity	*Black Swazi Citizen*

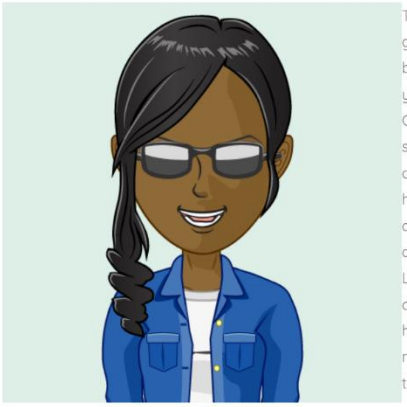
Figure 41: Detective TenG Profile/Bio (Mogale, 2021)



By her own admission, she is a daredevil who is a serial risk-taker who sometimes has a no-holds-barred approach to life and situations. Growing up in Berlin in an atheist family, religion doesn't have an influence in her life nearly as much as it does with TenG who grew up in a Christian environment. 34 years on this earth has seen her go through a series of mishaps and tragedies; from losing her mother to cancer, to being disowned by her father for being gay. She does not, for the life of her understand why her father is homophobic in a liberal environment. Even though she has adopted a somewhat cynical view, she still has some optimism that the people she helps through MSCU can find comfort and justice.

Name	*Senzi aka Sandz*
Ethnicity	*Black German Citizen*
Height	*1.62m*
Occupation	*Detective, MSCU*
One-line descriptor	*"Exciting shit! Let's get cracking!"*

Figure 42: Detective Sandz Profile/Bio (Mogale, 2021)



Tandi has always wanted to be in the police force. She grew up in a family of law enforcement and has aspired to be the leading Chief of Police since she was a fledging youngin. Currently the Deputy Chief of Malagwane Special Crimes Unit, she takes her job seriously and has made some significant changes which put her in good stead for consideration for COP post. What people don't know about her is that beneath her serious no-nonsense exterior and deadpan humour, she has a heart of gold and truly cares about the people she leads and the community she serves. Life has been rough on her. While she grew up in a middle class environment and was shielded from most of life's harsh and grating lessons as a child, unfortunately she was not spared in her adulthood. She had to fight tooth and nail to prove her mettle as a woman in positions of power.

When she is not in work mode, she loves collecting classical music vinyls and enjoys a glass of whiskey on the rocks and muses about life. No one is privy to her life beyond work; she prefers it this way, as she had learnt from the past that the less people know, the less they can use against you.

Name	*Tandile aka Boss Tandi*
Ethnicity	*Black South African Citizen*

Figure 43: Deputy Chief Tandi Profile/Bio (Mogale, 2021)

Another way to provide an immersive experience, according to Riedl and Bulitko (2013) is by "*directly manipulating the fictional world states."* Immersion provides users with the ability to directly influence how a story unfolds. This, of course, entirely depends on how the author has curated the narrative by determining the number of choices the user can navigate. The user can navigate within that ambit of the narrative. For *Maru Odyssey*, I carefully designed certain choices for the user to enjoy when navigating the narrative. Even though there are fewer choices in the

story, this is deliberate, as I wanted users to have fewer but more impactful and meaningful choices which dramatically advance the story. The two pivotal choices: the choice for the user who plays the character of Detective TenG can choose to either intimidate the suspect she is interviewing him to get him to spill the beans or call his bluff. By choosing to use intimidation, the user would hope to get the suspect to talk by using the power of fear. Another choice is to call his bluff and infuse some half-truths to get the suspect to be spooked and realise the jig is up and that he needs to talk. This diegetic choice seems to work better and it advances the trajectory of the story forward. It subsequently leads to even murkier waters where the player/reader gets taken down the rabbit hole of the carnage that took place in the '90s when King Nerima and his wife Queen Osako from Mbabane Empire infiltrated the Malagwane Empire led by Queens Sikhalo and Katana.

Immersion is closely linked to the tenet **Interactivity**, for to have immersive experiences in digital storytelling environments necessitates, by design, interactivity with a particular medium by drawing on the affordances of that medium and how said medium induces pleasure for the user in portraying the narrative elements through enjoyment derived from agency in decision-making/taking. Interactivity as a tenet, as introduced in Section 2, incorporates various media into the iteration of a story to elicit emotive response for the user who then takes certain decisions to influence the trajectory of the story.

To extrapolate, again, from Riedl and Bulitko (2013) by borrowing the factor *"directly manipulating the fictional world states"* of a narrative, interactivity in *Maru Odyssey* is produced in a number of ways. The primary conduit for interactivity in Twine is through links or nodes which, when clicked on, advance the story to the next passage. This form of interactivity ensures the user manipulates the storyworld and they are directly involved in the agency of the story by advancing it forward. Equally vital to the advancement is the pacing. From the beginning of the story, there is a sense of urgency that is sparked when Deputy Chief Tandi calls in Detectives TenG and Sandz into her office and informs them of how vital it is to take action and solve the mystery of the two murders that took place in Malagwane Ruins (MaRu) Castle. This already set the tone that the pacing is fast, urgent and no time should be wasted in taking action. As the story progresses and more clues are uncovered, the pacing becomes even more pregnant with tension and suspense.

Integral to links/nodes is also the provision of choice. To reiterate the stance taken by Bernstein (2009), as alluded to in Section 2, about hypertext links, Bernstein speaks of the power of choice and how the reader experiences the text in different sequences as a result of said choices made. He lays the groundwork for how choices should be understood by saying, " A specific trajectory through a hypertext is a reading. The sequence in which events are presented in a specific reading is a plot." (Bernstein, 2009). During the creative process, I had to be strategic about how this would be done. In certain parts of the story, two choices were presented to the user who would then click on one choice that would lead them to a different part of the passage. This is demonstrated by the following figures below:

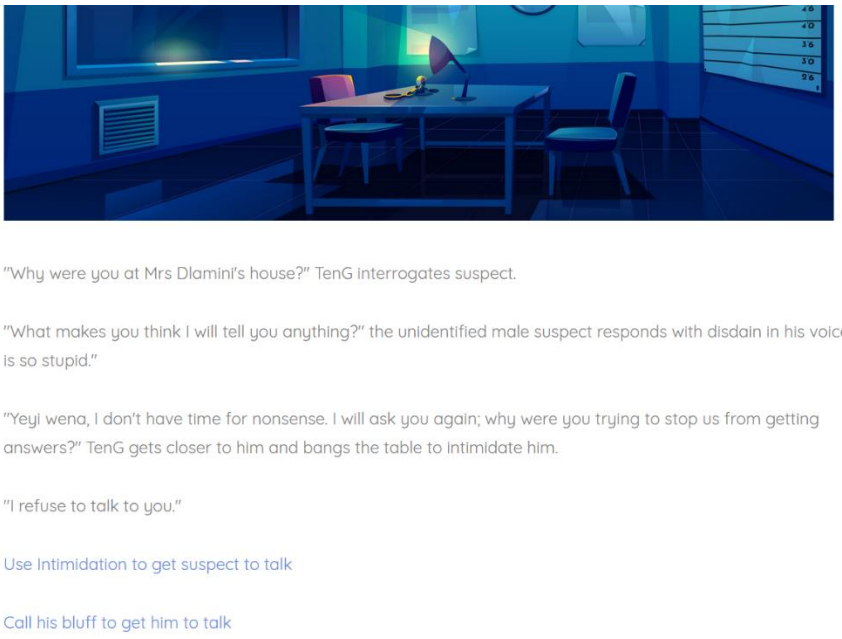


Figure 44: Choices Presented to User to Get Suspect to Talk (Mogale, 2022)



Figure 45: Users Presented with Two Choices to Determine What Caused Feud (Mogale, 2022)

A user who, upon getting to this part of the story, would have chosen the first choice “King Nerima having an affair with Osa from Malagwane Empire”, would be taken to the passage below:

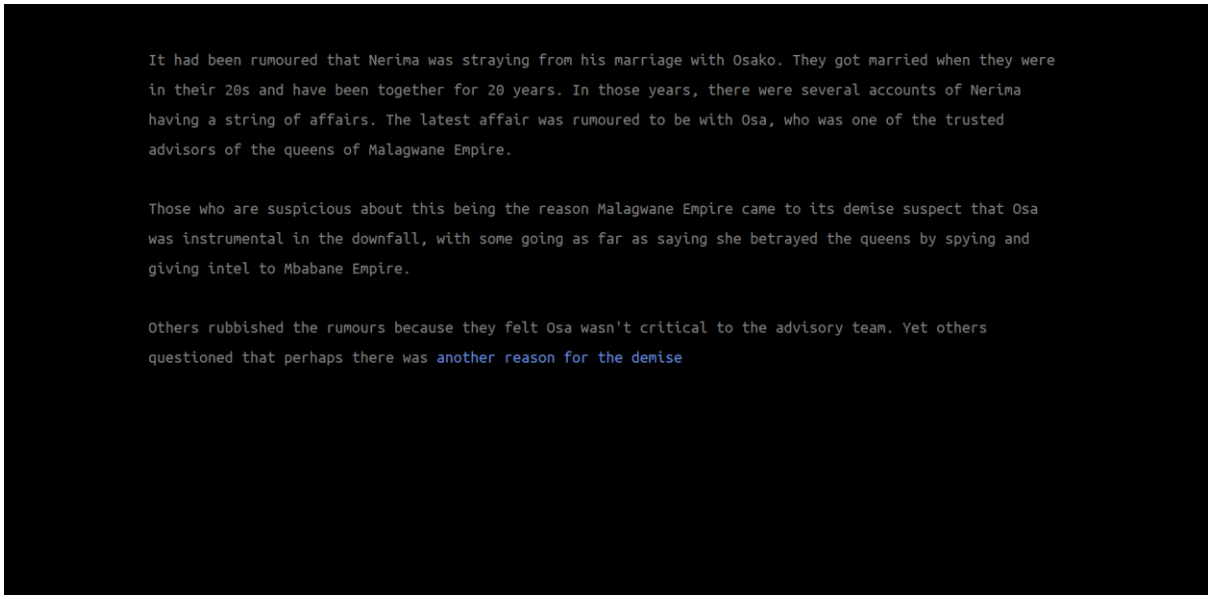


Figure 46: Passage Shown for User Who Chose First Choice (Mogale, 2022)

A user who would have chosen choice two instead of choice one, according to Figure 45 above, would have had the following result:

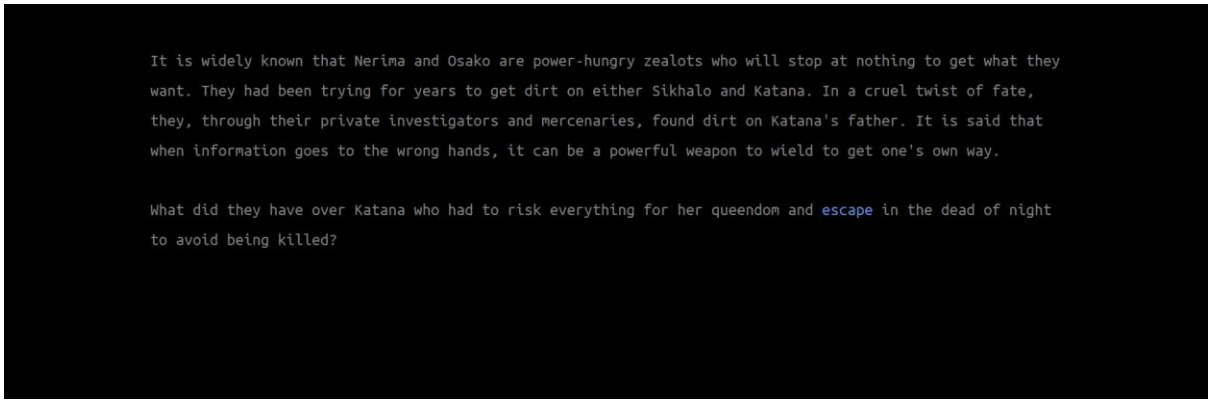


Figure 47: Passage Appears after Choice Two is Chosen by User (Mogale, 2022)

This kind of immersive storytelling is the backbone of multi-branching nonlinear narratives that provide users with a variety of choices that influence how they interact with a story. The very premise of nonlinear narratives reiterated by Bernstein (2009) – as alluded to in Section 2 – is the non-sequential nature of hypertext-centric narratives which challenges the perception of narratives that follow a sequence. In several points of Maru Odyssey, the linearity of the story was broken. In the passage where Detectives Sandz and TenG are in Boss Tandi's office where Boss T tells them about the importance of solving the murders that have taken place at MaRu Castle, I provided the user with two ways to navigate the story – they can either choose to click on the links Maru Castle or murders. Clicking on the former gives the user a flashback to two days prior where the crime scene at MaRu Castle shed some light about the murders that took place. Clicking on the latter takes them to the next passage (forward), but then in the next passage, I gave them an option to click on a link that takes them back to the scene at MaRu Castle to get more context. This demonstrates two different ways of navigating the same story.

Another important affordance that Twine has is the use of media such as images and sound effects. In *Maru Odyssey*, relevant images pertaining to the characters, murder scene and police office environment at Malagwane Special Crimes Unit (MSCU) were incorporated. These were thoughtfully chosen to portray certain aspects of the narrative through visual immersion. One of the images incorporated is observed below:

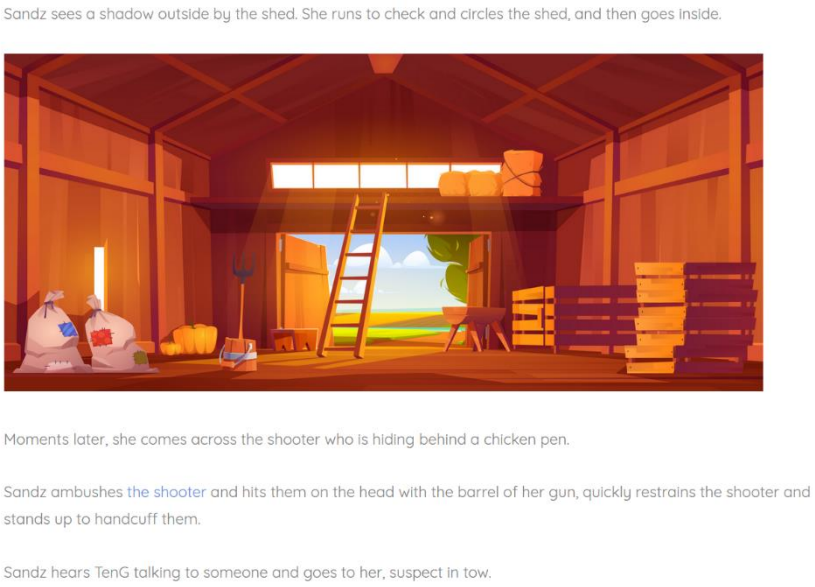


Figure 48: Image of Shed Depicting Where Shooter Hid While Firing Bullets (Mogale, 2022)

The importance of immersion and interactivity through visual elements breaks the monotony of immersion through text and provides a refreshing but different experience for the user who, in addition to reading text, also experiences the story through images. Not only that, but this particular scene with gunshots also provides aural immersion where gunshots are heard. Adding sound effects for this scene to emphasise the fast-paced nature and climax of the story adds to the urgency and suspension of belief that is integral to the tapestry of aural immersion in interactive fiction storytelling.

Yet another visual element in Twine that breaks monotony of immersion through text is the background feature. This feature allows for the user to be immersed in different backgrounds and be transported in different worlds. In *Maru Odyssey*, the user is given two different backgrounds – a white background to denote the story happening in the present moment in the storyworld with characters TenG, Sandz, Deputy Chief Tandi, and a black background to denote a past period on year 2000 with King Nerima's part in the story and to give a backstory about the invasion of Malagwane Empire by the Mbabane Empire. Figures 44 and 45 above depict the stark background differences, where Figure 44 is denoted years after the destruction of the Malagwane Empire under Queens Sikhalo and Katana, and Figure 45 depicts the year 2000 when King Nerima and Queen Osako orchestrated the demise of

Malagwane Empire. I made this deliberate choice to have different backgrounds for present and past periods to give the user a different kind of immersion that provides a stark contrast that immediately tells them they are entering a different realm. It is deliberately “provocative” to have what I can describe as a jarring experience. My intention with this was to evoke more impact that will be memorable as they navigate the storyworld and remember how the background interface played a role in their immersive interactive experience.

Another crucial element and affordance Twine provides is the utilisation of timed texts. The function of these, amongst others, is to mimic the dialogue nature of conversation between characters in real time. These are utilised in Maru Odyssey to illustrate conversations between characters in real time in the same way one would have conversations with others with the back-and-forth rapport. This was utilised in Sugarcube version of Twine – as discussed in Section 3 – which affords the macros of timed texts which can be timed for a duration of a few seconds in a particular passage or “chapter”. This provides a pleasurable immersive experience for the user who enjoys the ability to see text appear one after the other in a cascading consecutive format. Interestingly, this decision during the draft project process came after the decision to cull the notion of a text-heavy narrative to instead cater for a more fast-paced action-oriented style of portrayal. This included inculcating the affordance of timed texts to reflect the dialogue of timed texts in certain scenes of the story.

Over and above the interactivity Twine provides through its system configuration elements and interface (more on this to be highlighted in author tenets), the cognitive processes the end user undergoes/experiences when interacting with the interaction fiction story play a big role. Extrapolating from Section 2 to highlight this, Sellers (In Bostan & Marsh, 2012) draws on the perceptual and physical nature of interactivity which play on the user’s response to physical stimuli as a by-product of the constructed fictional simulated world.

To a much lesser degree, Twine does not fully speak to the tenet **Integration** which speaks to the seamless viewing ability of stories in different devices. During the design process, it made me realise that this aspect of integration is not a tenet that Twine prioritises as the nature of the medium narrative construction does not

prioritise an optimum viewing experience on different devices. An advantage Twine has that is applicable to integration is that it is published as a Hypertext Markup Language (HTML) file that can be viewed on browsers such as Chrome, Mozilla Firefox, Microsoft Edge, Safari and Internet Explorer. That means that a published file on a PC can also be viewed on mobile. In this respect, integration applies, but not nearly as effectively as it could on other platforms such as websites where a story can be linked from the website to social media sites and maximise on the usage of certain media on those platforms to convey the story on those mediums.

That said, the integration of different media and modes on Twine allows for successful application of the tenet on the Twine interface. *Maru Odyssey* was able to successfully integrate text, images, sound effects, and timed texts in different parts of the narrative to immerse the user. Chibana (2015) alluded to the effectiveness of successful integration in how it incorporates different modes and media into a story and how the infusion of these transports the user into a storyworld such that "…viewers forget they're reading text, listening to sound effects, looking at visuals and scrolling down all at the same time and begin to experience it as a whole." This means that the successful integration of these media will result in users seamlessly experiencing the platform and medium without breaking concentration from the storyworld.

Impact as a tenet, is a by-product of the other three tenets *Immersion, Interactivity* and *Integration*. Without these tenets, there would be no impact. The user, in interacting with the story and being immersed in the storyworld is impacted by the story. Impact, drawing from Section 2 of the research, is influenced by two factors: the reaction of the user and the action taken by the user as a result of their interaction with the storyworld. What reactions and emotions are evoked from being immersed in *Maru Odyssey*? There are plenteous emotive elements that could induce impact and what that impact would be is individual to a particular user, i.e., different users would be moved by different elements of the story and derive different impact from it. For instance, one user could be emotionally affected by the deception and cruelty of King Nerima in how he employed cruel tactics to oust Queen Katana and break the bond between her and her wife Queen Sikhalo, ultimately resulting in her leaving her wife a letter in the dead of night and escaping. In the subsequent events that follow, the invasion of Malagwane Empire which destroys the empire.

Other users can be emotionally affected by other parts of the story at different points and be invested in the characters TenG, Sandz, and Boss Tandi.

What actions could they take both during and after the story? During the story, the user takes actions that involve links that lead the user to different parts of the narrative. Impact derived from those actions determines how they feel about the story. What actions could they take after the fact? Unfortunately, this is where the tenet has its limitations in this context, as not much action can be taken after interacting with the story outside of perhaps informing those with whom they interact about it. In other interactive digital storytelling mediums, actions taken afterwards could be sharing a particular story on social media platforms.

The successful integration of different media and sound effects in *Maru Odyssey* was critical in driving the story forward and providing a seamless integration with the media to cultivate an immersive and interactive experience that evokes emotional responses that rouse impact. Reflecting on whether the impact would be more emotive or garner more experiential pleasure and enjoyment were there are no images and sound effects to accompany text is something I can only posit.

Reflecting on the creative process of Twine while using the frameworks of the user core tenets in the forefront helped me keep the end-user front and centre and thinking about the experience of the user at every part of the process. At times this very concept of putting the user's needs frustrated me because I had to think beyond my own perspective and think about what another person can derive from the story and how they interpret it. This meant trying to balance between revealing just enough information to advance the story forward and being careful of not revealing too much that would bore the user and make them disengage. All of this design and creative thinking on Twine came with understanding the nature of Twine as a medium and how Twine performs best with shorter but succinct text which drives action forward. In as much as I wanted to provide so much more context for my characters and have more detail, I had to curtail this information by finding a happy medium between providing enough detail to arouse curiosity and suspense, but also not be so removed that users get confused. This is admittedly a balance I am not quite sure I have rendered with precision. What I can say with precision, however, is that I have been enrichened by this experience and I have gained some insightful

nuggets about Twine that make it such a beautiful platform to create nonlinear stories.

In the section below, I will delve into Ren'Py and how the end-user tenets impacted how *Malagwane Ruins Odyssey* played out on this platform and how they were prioritised.

Ren'Py

Ren'Py, by its very nature as a visual novel, utilises visual elements as its primary focal point. Much like Twine, which is also geared towards visual and aural immersion, Ren'Py too, affords these perks. From the outset, Ren'Py is a computer-mediated tool that focuses on dialogue, images, sounds and sounds effects and text as its form of immersive modal tools. *Immersion* as a tenet lends itself quite beautifully in Ren'Py as the interface gives more room and leeway for users to be engrossed through dialogue texts, images, sounds and effects. When creating *Malagwane Ruins Odyssey,* one of the fantastic affordances Ren'Py allows that I enjoyed was how it allows the user to see different characters' names designated different colours as part of the aesthetic appeal. Images offer a far better immersive experience in Ren'Py than they do in Twine. Their appearance as a cover on the whole interface and dialogue at the bottom, emphasises them and gives them a magnifying glass in contributing to compelling storytelling through imagery and accompanying dialogue, sound and sound effects.



Figure 49: Images and Dialogue as a Central Canvas for Ren'Py Interactive Storytelling (Mogale, 2021)



Figure 50: Maru Odyssey Investigation Mind Map in Boss T's Office (Mogale, 2022)

Figures 49 and 50 above illustrate Deputy Chief Tandi and TenG dialogue boxes at the bottom of the screen. These are depicted in different colours, with Boss T's name

in orange and TenG's name in green. This contributes to the immersive experience of the user who can firstly discern clearly that two different people are speaking, and secondly, the colour separation is in itself a clear delineator. The user gets transported through both narrative and mechanical immersion as they derive pleasure from the delineation of the different colours of the characters as they navigate the story (narrative immersion), and also experiencing enjoyment from a platform that can do something as "cool" as this in creating unforgettable dialogue-centric and focused characters (mechanical immersion).

Backgrounds, much like in Twine, also contribute to the immersive experience of the user in Ren'Py. Where Twine brings this to the fore through the emphasis of background colours, text, images and links, Ren'Py effects this through a central background image with dialogue, or a black background with text. This is demonstrated in Figures 51 and 52 below, which illustrate a scene at Maru Castle at a crime scene of a murder investigation:



Figure 51: Black Background Scene as a Precursor for Action to Follow (Mogale, 2022)

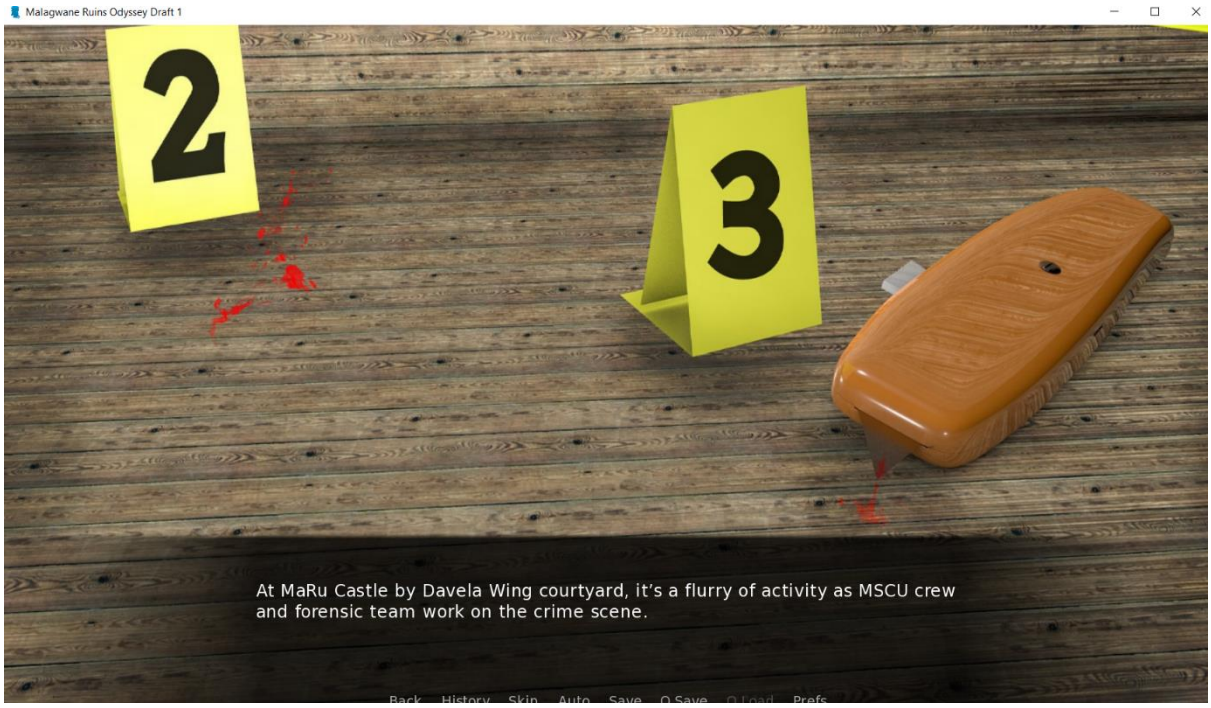


Figure 52: Flurry of Activity at MaRu Castle as Murder Investigation is Underway (Mogale, 2022)

In reflecting on the immersive affordance for Ren'Py, much like Twine, it is also geared toward more action-oriented storytelling and less of the heavy-text centric narrative, unlike a website which allows for more text to be integrated into its interface as part of the affordance of the medium, as it is, after all, borne from the desire to blog and tell stories, which later morphed into making websites for business enterprises, but was primarily designed as a medium for democratizing publishing. For Ren'Py, telling the story in as succinct a manner as possible is imperative. In fact, by its very design, the moment more text than is required is added into a particular scene, it will cut it out and it will not show. Suffice to say, it is much better to cull the text and focus on action-oriented storytelling to progress the trajectory of the story. In many ways, Ren'Py exemplifies the adage "a picture tells a thousand words" as the very concept of imagery in Ren'Py in how its displayed and in how the user is afforded an immersive experience and interaction with the story through images, it prompts a pleasant experience for the end-user to deduce the story scene through images and accompaniment of dialogue from characters, sounds and sound effects.

An affordance that I enjoyed in the creative process was adding sounds/music and sound effects to scenes. Ren'Py provides this affordance in its configuration to add music. This experience for the user is pleasurable as they not only see the images, read text, but they also listen to music as they interact with the story. In creating *Malagwane Ruins Odyssey*, this was taken into account to incorporate into the story. Sound effects contribute to the interactive and immersive nature of storytelling on Ren'Py. An example of this is depicted by Figure 53 below. The image with the bomb is accompanied by bullets sound effect in the actual Ren'Py story. Not only does the user see the image, but they also derive enjoyment from the sound that follows in the scene.



Figure 53: Image of Bullets Flying Accompanied by Sound Effect of Bullets in Ren'Py (Mogale, 2022)

Interactivity in Ren'Py, synonymous with Twine, affords the user with choices to advance the story forward in some way. What is pertinent to highlight are the differences in how this comes about. In Twine, the very nature of the narrative structure and scripting language necessitate that users use links to drive the story forward to advance to a different passage. Ren'Py, on the other hand, provides interactivity differently, where users do not have to use links to advance to the next scene and rather they interact through clicking on the interface for the story to

continue or through choices created by the author to display a specific scene chosen through agency employed by the user. This is demonstrated in the image below:

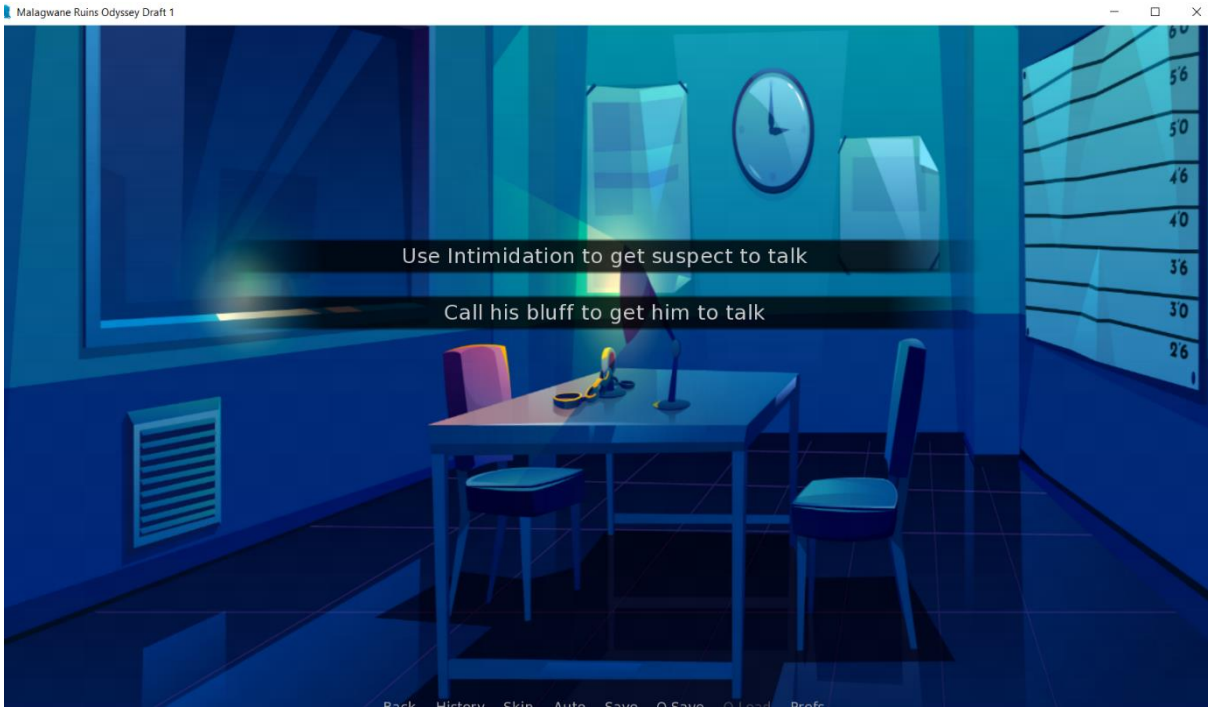


Figure 54: Ren'Py Interactive Experience Rendition of Choices (Mogale, 2022)

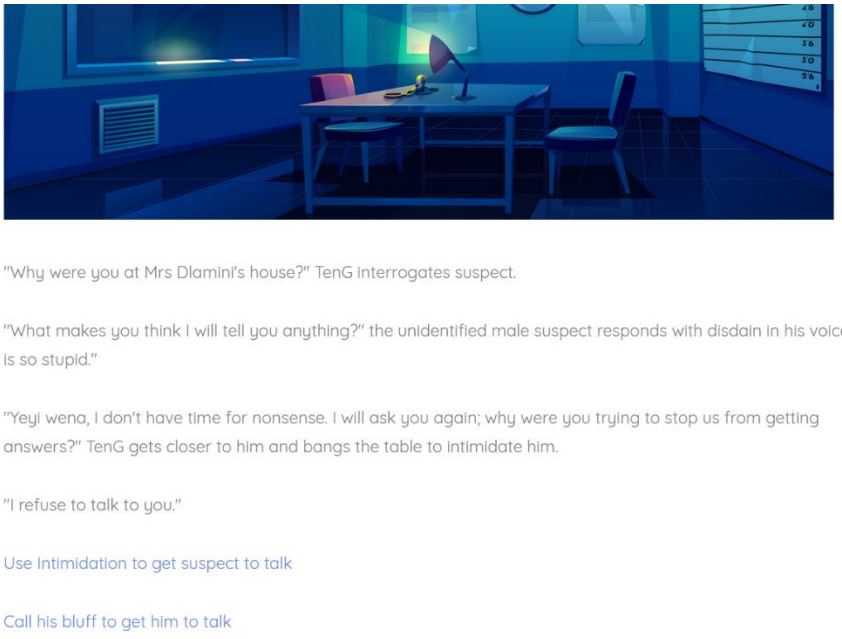


Figure 55: Twine Interactive Experience Rendition of Choices (Mogale, 2022)

What is compelling about the images above is that juxtaposed with each other, it is clear that Twine provides interactivity different than Ren'Py. Twine highlights links through the text itself and does this by displaying a different colour to denote links to be clicked, whereas Ren'Py renders choice through text box and does not change the colour of the actual text but by the user clicking on any of the choices shown, they will be taken to the corresponding scene in Ren'Py and corresponding passage in Twine.

Interestingly, where Ren'Py places greater emphasis on immersion as a tenet and the user is thoroughly immersed in the storyworld through the elaborate display of images, employment of sounds throughout a scene and the dialogue of characters in scenes, Twine places a great degree of immersion and interactivity by driving the story forward for the user through its links/nodes as a conduit of interactivity. With Ren'Py, the degree of interactivity can be to a lesser degree than in Twine – the Ren'Py platform itself allows for users to auto play the scene such that they can experience the story without necessarily clicking on any part of it to advance it forward unless a particular scene necessitates this. With Twine, the story cannot advance forward without the agency of the user in clicking links to go to the next passage of the story. As a tenet, interactivity in Ren'Py, while incredibly important, has a much lesser degree of emphasis than on Twine, in which the very fabric of Twine is premised on it.

Ren'Py employs integration in a much more seamless effect than it does in Twine, especially as pertains to the integration of different media into the composite elements of the story. In *Malagwane Ruins Odyssey*, some scenes have images, sounds, dialogue and sound effects that complement the story in such a way that a user can be immersed in it completely with more ease, especially the employment of music in scenes, where this wasn't a natural part of Twine's configuration. Some of the scenes that make this compelling for the sound effects in Ren'Py are during the invasion of Malagwane Empire by Mbabane Empire where I used bombs to denote the carnage and the severity of the war between these two empires. Both the image showing bombs flying and the accompanying sound effects emphasizes the visual and aural modes of immersion, thus resulting in an impactful integration between these types of media depicted.

Ren'Py plays into the tenet Impact well, as the immersion tenet ensures the user is so engrossed in the storyworld and is affected by the emotive nature of the unfolding of events due to how the interface is displayed. Visual novels provide an interesting aesthetic that is distinct from primarily text-based modes of storytelling. What reaction is evoked in the user upon interaction with Ren'Py? The successful immersion and integration elements of the narrative structure compel the user to derive emotive reaction through interacting with the story.

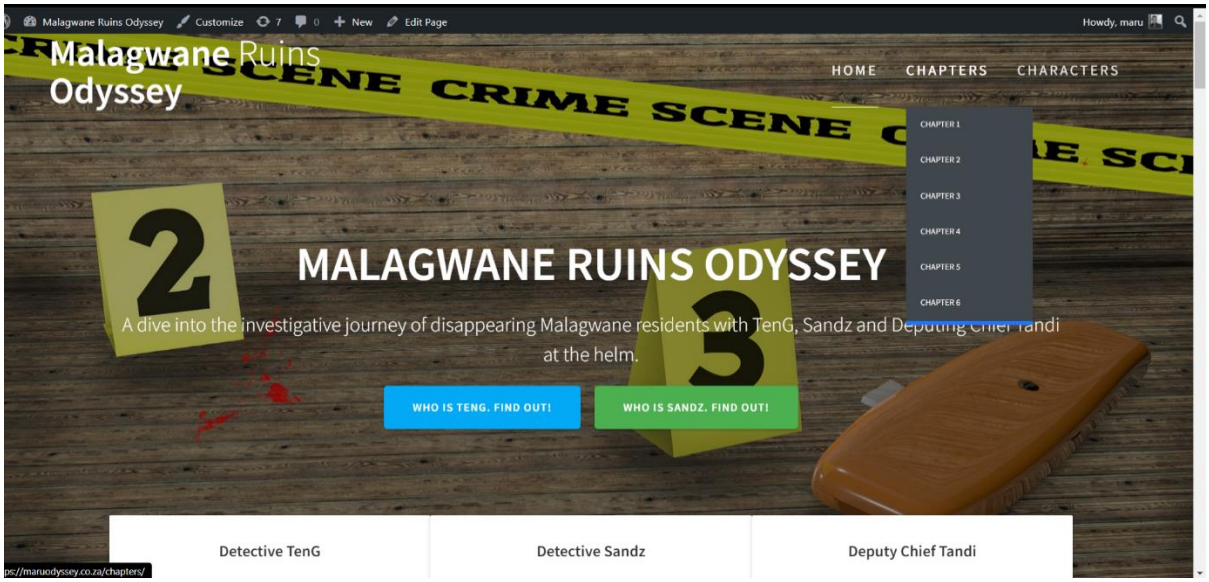
Below, I will discuss the end-user tenets from the lens of the website and how they influenced the creative process and which tenets are prioritised in the website platform.

Interactive Website

Throughout the creative process for designing the website www.maruodyssey.co.za, the research unfurled an array of realisations, chief among those being that a website draws its affordance as a medium from traditional storytelling such as books. The core features of books are replicated in websites in digital format, with the added benefits of providing more interactivity and more agency to the user where they determine the trajectory of the story to some extent. In a paperback book, the reader is a passive observer who reads a predetermined story that has already been written without room for the reader to in any way manipulate the storyworld in the book. Mediums such as websites, through computer mediated processes, facilitate the manipulation of virtual worlds and afford the user more agency to advance a part of the story forward. Clicking on links is a form of agency that empowers the user to direct their viewing experience in a different direction. They very power to take action in a simulated world derives pleasure for the user who is able to, in some way shape and form, influence the direction of the story.

To juxtapose the similarities of paperback and hardback books and websites, books have a contents page (predominantly non-fiction works) and chapter divisions (fiction works) which give a clear delineation of different chapters. This aesthetic is replicated in a website in the form of a menu, which is displayed on a horizontal header in website that shows the different webpages the website has. Webpages,

again, are reminiscent of book chapter pages, which remind the reader of the familiar in digital format. Figures 56 & 57 below demonstrate the menus on the horizontal header of the website with submenus displaying the chapters and characters. Much like books, these are directive indicators that direct the user to the pages contained in the website. The user has agency to navigate to a webpage of their choice through interacting with the site by clicking on the desired link.



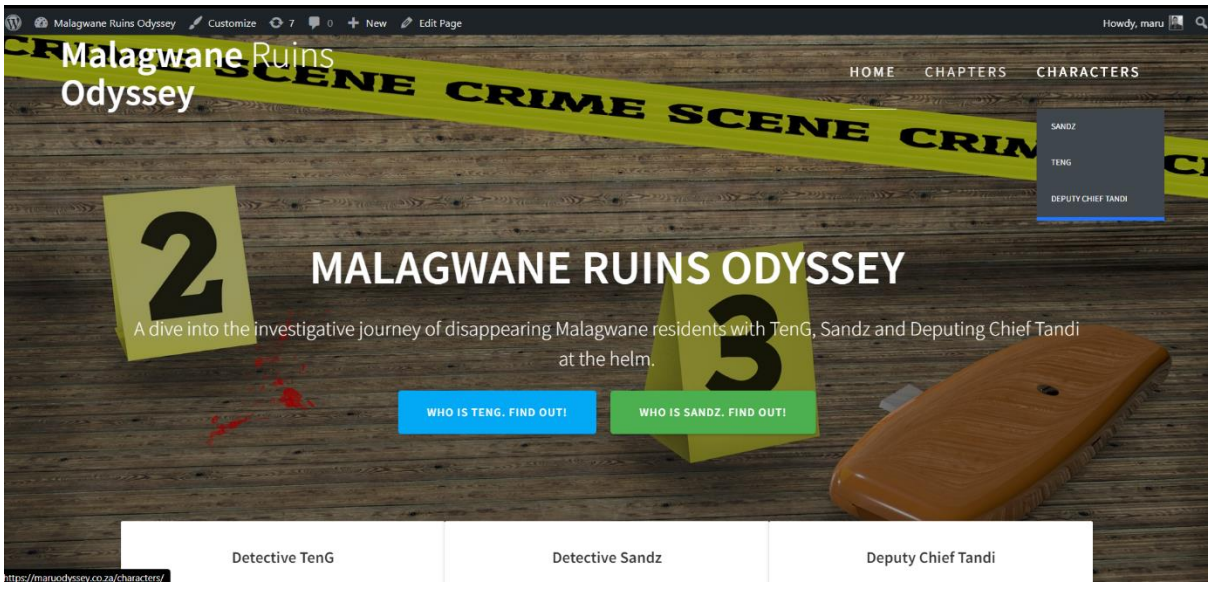


Figure 56 (top) & Figure 57 (bottom): Horizontal Header Menu with Submenus and Webpages (Mogale, 2022)

Hutcheon and O'Flynn (2013) in speaking about audiences talk about the concept of degrees and types of immersion. Modes of engagement such as printed books, e-books, websites, offer the reader/audience different types of immersion and degrees of immersion. Hutcheon and O'Flynn (2013, p. 133) outline three types of immersion:

- Immersion through imagination
- Immersion through visual and aural
- Physical immersion

Printed books primarily offer immersion through imagination. The reader is transported to a fictional storyworld by tapping into their imagination through conjuring up images of characters and storyworld based on descriptive elements provided by the author. Mediums such as websites, on the other hand, offer immersion through visual and aural. The output media the viewer/user engages with is visual in nature and the medium itself offers the affordance of visual and audio elements. For instance, website content can have videos and recorded audio inserted in the website.

Maru Odyssey combined the forms of immersion of imagination and through visual immersion. The visual immersion was achieved through placement of images strategically in different chapters to engage the user through both text and images and offer some visual elements of the imagination employed by the user in engaging with the story. The main characters Detectives TenG, Sandz and Deputy Chief Tandi have their own bio profiles which give context to who they are and add to the relatability of the characters for the user. These profiles are clearly indicated on the home page and have clickable links for the user to read them in more detail in a separate page. To a large degree, websites utilise visual immersion, and depending on the particular site, can also employ aural immersion, where needed. Interactivity for *Maru Odyssey* is primarily achieved through the aesthetic and intentional placement of buttons with links for the user to navigate to the relevant part of the story, or to find out more about the characters. A look at Figure 56 above depicts blue and green buttons with embedded links, that when the user clicks, takes them to a different page that gives them more information about the characters.

Drawing from the composite principles of storytelling for novels, a key component of websites is that they allow much greater affordance for more text to be written as

part of storytelling; the expectation of the medium lends itself well to more contextualisation and wording. As a result of this affordance, the *Maru Odyssey* story has more text and more context in other sections than it does for Twine and Ren'Py which are more focused on fast-paced action-oriented interaction, whereas the website affords a great deal more slower paced contextualisation and more detail to the story. This kind of immersive experience gives the end user the pleasure of getting more 'meat' to the 'bones' with more background and contextual information that give a more holistic element to the story. I enjoyed this aspect during the process where more text could be added to the investigative adventure piece and alter certain parts of the story to provide a different experience for the user; these parts of the story were not part of Twine and Ren'Py.

Where Ren'Py offers superior integration of music and sound effects into its narrative construction and therefore employs a great deal of immersion to a larger degree with these elements, the website interface doesn't lend itself too well in implementing these effects, which was a source of frustration for me, subsequently making the choice to not incorporate audio and sound effects to the story and rather focused on visual immersion with the aid of images and immersion through imagination with the accompaniment of text. The immersion experience for the user is no less diminished without audio and sound effects. What makes Twine and Ren'Py succeed in implementing audio and sound effects in real time at the exact place that requires these elements is their native design build that allows for command functions to implement these. With a website, audio is stored in a media library and while it can be implemented in the website, this can only be done for the audio on a separate block and not as part of inline text, which defeats the purpose of real-time action at a particular point in the story. That, however, I maintain, does not diminish the abilities of the website to present compelling stories through its medium without these elements.

Interestingly, the website offers a great deal of integration with different elements. While this was not explored to a large extent for *Maru Odyssey*, the platform itself is receptive to integration vis-à-vis sharing different parts of the website to other channels such as social media channels through showing previous of that particular section in the website. The website as a medium was designed for accessibility and

ability to share content across a variety of platforms and therefore facilitates transmedia storytelling.

Impact, much like Twine and Ren'Py is derived from the user's experience and interaction with the medium and how said medium evokes emotive responses for the user to contemplate both during and after the experience. Where the website differs from Twine and Ren'Py, it is easier for users to share content from websites to their own social media pages on platforms such as Facebook directly from the website. This is much more challenging on Twine and Ren'Py, and especially Ren'Py which necessitates saving files in zip files, which makes the process cumbersome for any user who does not have Ren'Py installed in their computer. The website provides a great deal more impact for the user who can be moved by the story and share it with others on their personal social media platforms, whereas the very same users would have a harder time doing so with Ren'Py especially. Twine offers a good middle point for this where Twine is shared via an HTML link which can be viewed by any user on any browser of their choice, and therefore would be accessible to more users who wouldn't need to have Twine installed as an application on their computers and can just view the story from a browser.

I have reflected on the end user core tenets for all three platforms and provided an analysis of how these have been prioritised in each platform, gave examples from *Malagwane Ruins Odyssey* where pertinent to demonstrate how the tenets worked and how the medium in which they are used is important in understanding the nature of the tenets and how they will be rendered/applied. Next, I will breakdown the author/creator tenets for all three platforms and explore the differences in how they influence the way the story is consumed/viewed based on the framework of the author tenets, and their applicability to a greater or lesser degree.

4.2 Reflective Analysis of Author/Creator Tenets

The author/creator tenets draw from the framework of Kim, Moon and Han (2011) who posit that the creation process and effectiveness of program tools is based on four key elements; Narrative Structure, Authoring Tools, Interface and Output Media. These are integral to interactive storytelling systems from which stories are crafted

through computer-mediated processes or what is termed Human-Computer Interaction (HCI).

Within the ambit of interactive storytelling systems is the **narrative structure**. This is the operational structure that underpins the design of a story framework. Key to this is the order and arrangement of stories and how this is done through an integral component called the scripting language. A scripting language is a computer-generated input language system that is designed to execute certain functions for a program to work effectively through its configuration functionality. Twine utilises three key languages – Hypertext Markup Language (HTML), Cascading Style Sheets (CSS) and JavaScript. Ren'Py uses Python as a scripting language upon which the Ren'Py framework is based. A website, much like Twine also utilises HTML, CSS and JavaScript languages. In the technology industry space, the languages for Twine and website are called Front-end Developer languages. What this translates to are languages that are used to generate output media that users can see and interact with.

Scripting languages facilitate creating stories through editors. These editors give the author scope to add certain functionalities pertinent to the story within the constraints of the system itself. Constraints are the affordances that a particular medium or platform provide within the limitations of its construction elements. Two aspects to take into account when dealing with constraints; the affordance of the medium in how its built and the author's intent in how they construct the story to give the user certain choices to navigate, which would otherwise not be available had the author not made the intentional choices of authoring particular elements into the story system.

The narrative structure tenet works in tandem with **authoring tools** which enable an author to create their story using scripting language frameworks. To do this, one of the main tools at the disposal of the author is an editing tool. Twine utilises three types of editors – the first editor is the main editor where text for the story is entered into the editor. This is the very same editor where the author can add links which will facilitate the user to click to the next link/node. The second editor is the editor where CSS is incorporated into the story to change stylistic elements about the story, from background colour to font, any animation effects, etc. The third editor is the

JavaScript editor. I only utilised the first two editors and did not utilise JavaScript editor or indeed JavaScript narrative language. Figures 58 & 59 below depict Twine's editors.

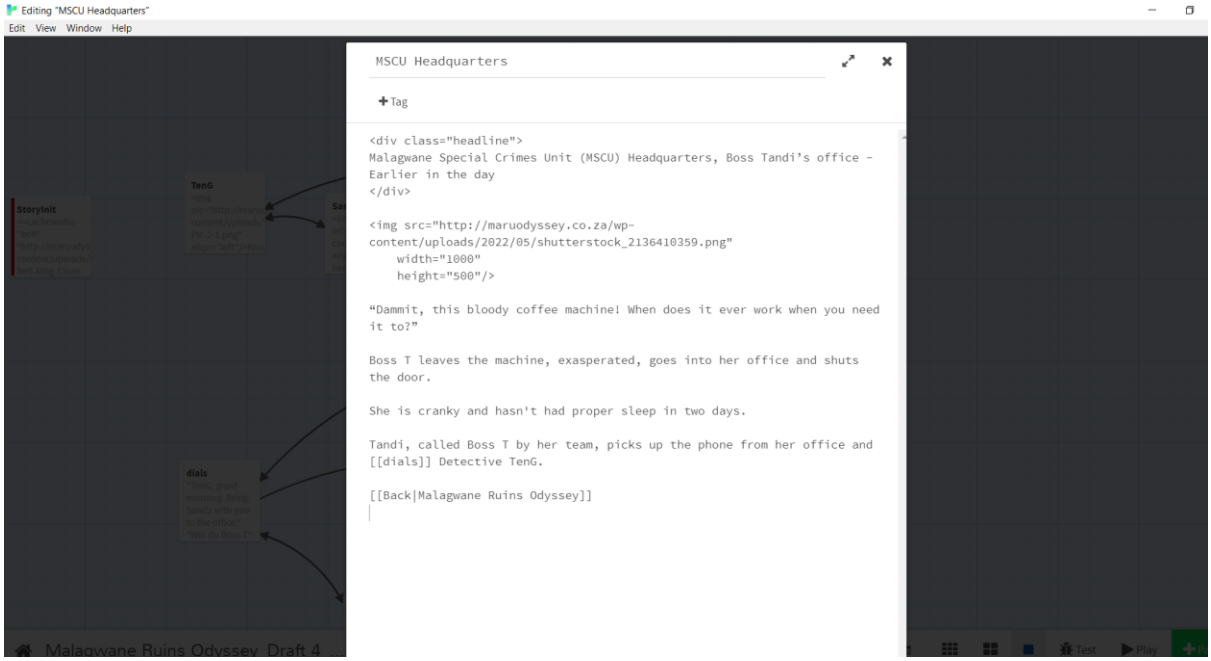


Figure 58: Twine Main Story Passage Editor Input Screen (Mogale, 2021)

Figure 58 above shows Twine passage or "chapter" called MSCU Headquarters. This editor is where the story text itself is used to input author's text. The editor utilises HTML language to render certain functionalities and uses CSS to style them. Deducing from the image above, the language input in tags < > is HTML scripting language which is understood by the computer program and when input correctly renders the output media. I found this editor a pleasurable experience to create Maru Odyssey – the simplicity of the display editor interface is a draw for creators who do not have any coding knowledge and can use it to learn as they go.

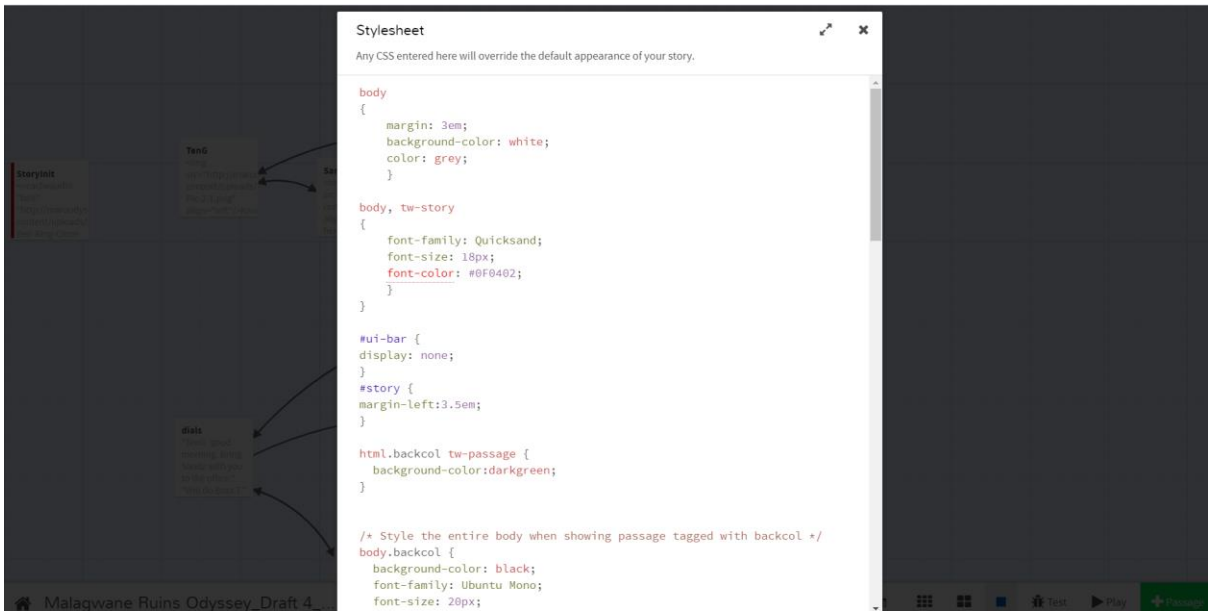


Figure 59: Twine's Cascading Stylesheet Editor for Styling Story Elements (Mogale, 2021)

Figure 59 above depicts a Cascading Stylesheet editor. This editor, as the name defines, is a stylesheet that is responsible for styling elements of the story. Depending on the creative process that the author/creator wants to embody in the story, certain stylistic elements will be used and some will not be needed. For instance, if the author wants to provide a certain background effect (see Section 3), which in Maru Odyssey was depicted in a white colour for present time storytelling and black for flashback denoting a past event. The stylesheet is where this is configured.

Ren'Py, on the other hand, utilises one editor called jEdit. This is stored under a script.rpy file that is configured under Ren'Py program files. The jEdit is where all story information goes, from the text to any special effects that the author wants to input. Figure 60 below illustrates the jEdit configuration screen.

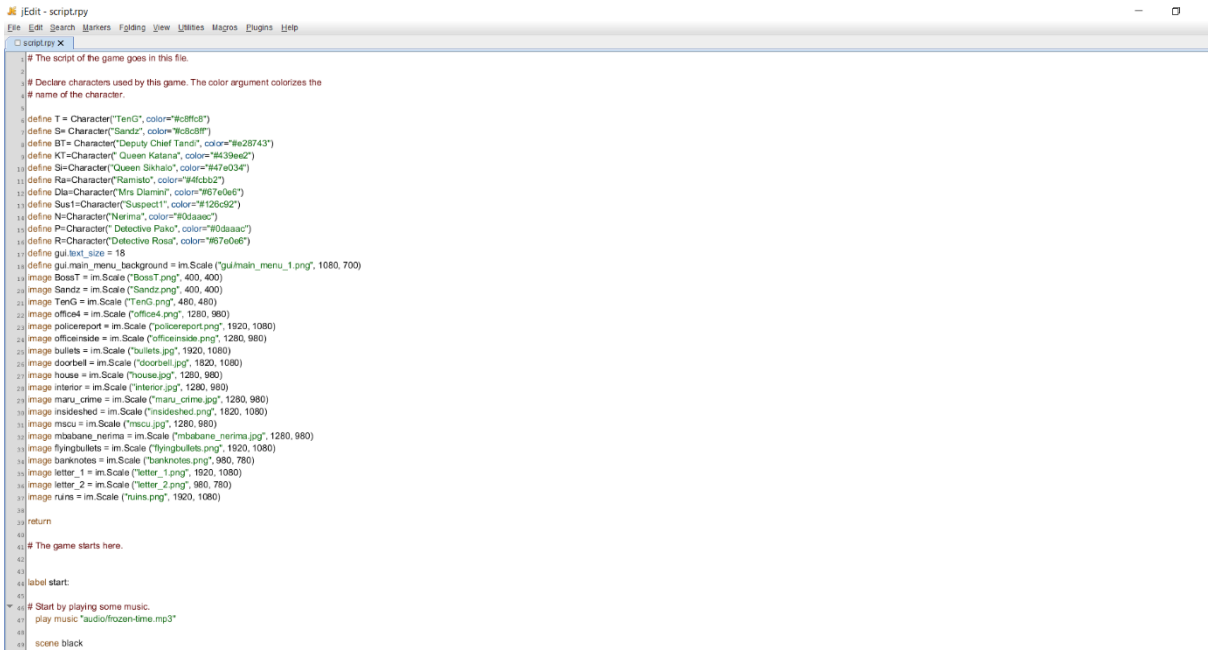


Figure 60: Ren'Py jEdit Authoring Tool on Python Scripting Language (Mogale, 2022)

A unique representation of the Python language input system is that before any commands can be executed in Ren'Py, certain elements need to be defined to make it easier for the output commands to execute the functions of the program. Some of the elements that were defined for Maru Odyssey are character names, and the colour of the names for characters, images – image name, dimensions and the output file type for the image. What is equal parts frustrating and enjoyable about working with jEdit for Python is that the language is precise. Any information that is entered incorrectly or is not correctly aligned does not execute output functions. This was a source of consternation for me during trial and error periods of the project where certain input commands were not executed correctly and the project would not render. An example of one such error during the project authoring stage is Figure 61 below:

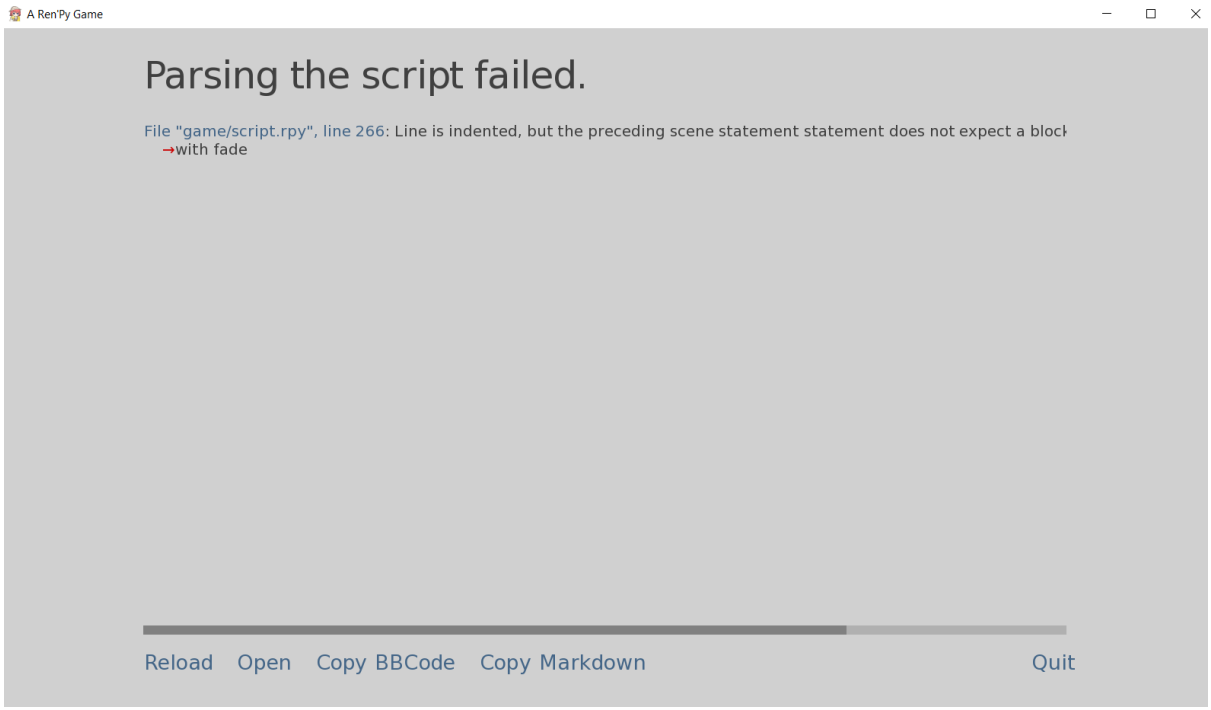


Figure 61: Ren'Py Game Failure to Render and Launch (Mogale, 2021)

During such roadblocks in the authoring process, I had to figure out what the issue was and rectify accordingly. By far the biggest disadvantage of Ren'Py is that if the input commands and elements are entered incorrectly, the game does not launch at all and it produces an error message until this is corrected. That sometimes meant that when the error was not immediately identified, it would leave me mystified and searching for a solution. In the same vein, upon fully grasping the inner machinations of Python, it becomes easier to work with the language because it is precise in input and execution and therefore when the author is cognisant of how the functionalities work, it becomes easier to work with the program.

The authoring tools for a website are predominantly afforded by three input functions;

- The chosen theme of a particular site, from which the Customize option (see Section 3) is chosen to customize elements related to the theme for the site
- Pages and Posts where the actual content for a story is written
- Plugins which facilitate the running of the website and can be seen as extensions to the website functionality

Much like Twine and Ren'Py, a website too has editors. WordPress uses various editors. The first one is the editor inherent to WordPress which comes as a default with the Content Management System. Other editors such as Elementor, One Page Express come in the form of plugins which are installed in WordPress and used to edit particular pages.

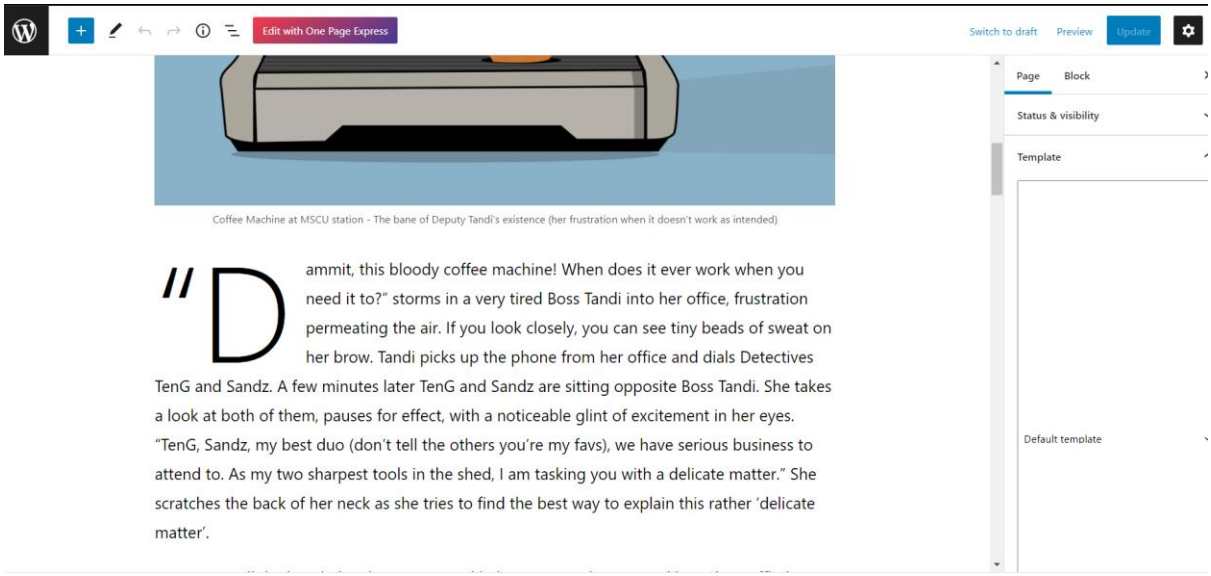


Figure 62: WordPress Page Editor Inherent to WordPress CMS (Mogale, 2021)

The editor in the above-mentioned figure comes with affordances such as adding media to page, aligning text, adding buttons, etc. These affordances create an enjoyable experience for the author who has more choices to navigate with.

The **interface** and the **output media** of the author/creator tenets work simultaneously as computer output elements to display and represent data. All three storytelling platforms have visually aesthetic interfaces that focus on maximising on the experience of the mediums. Twine embodies an interface which is resplendent with colour through links which can immediately be separated from text, which is not linked, provides an enjoyable experience through creating different backgrounds and other input functions. Ren'Py as a visual novel storytelling tool is equipped with an interface which displays images in a cover orientation, displays dialogue in an attractive format on screen. Websites display content on pages or posts with plenty of white space which produce an enjoyable reading experience where content is not cluttered and can be read with plenty of 'breathing room.'

Interestingly, all three platforms afford the same output media elements such as images, sound and sound effects. It must be said that I was not able to explore the full scope of all three platforms but discovered through the process and more output elements could be explored with further study and time. Ren'Py and Twine provide output formats such as animated content and transitions. Ren'Py is particularly strong in this regard, where characters can be 'commanded' to appear on the interface page from the left, right, centre, etc. The very same platform can output media elements of characters per second of text typed on screen where the typing speed of the text can be seen in real time. This is very clear in the section of Maru Odyssey where Queen Katana left a note for Queen Sikhalo. I made that output element to appear as a letter read in real time for the aesthetic enjoyment for the user.

What is clear about the interfaces and points of emphasis for each platform is that for Twine, text and links are central components of the story interface, Ren'Py places more emphasis on images and dialogue and the website centres more on text and the effective and efficient utilisation of white space on its user interface display.

4.3 Lessons

By far the greatest lesson was understanding the fluidity of the creative process and how having one idea originally can morph into a whole different concept once the creative process is underway. It became important to let go of ideas which did not serve the central narrative or did not fit in with the overarching direction of the story upon receipt of new information which fit in better with the ethos of the story. Adjacent to this lesson was having to cull out certain story parts because of overscoping, with some concepts shelved altogether as it felt they would have made the story too long and not fit within the ambit and scope of this research. This came with a great deal of chopping and changing where initially this was a story which would have explored archaeological elements and an expedition to dig precious metals for clues to solve mysteries. But after trial and error an investigative adventure story felt like a better fit which would focus on solving murder investigation mysteries instead. This, in fact, is why I called the story *Malagwane Ruins Odyssey*

because I had envisioned taking the user through an odyssey into the archaeological history of Malagwane and exploring clues that led to the ruins of the castle and how the empire came to its demise. Due to issues of overscoping and changing the landscape of the narrative, exploring the investigative side of the story felt much more fitting, hence the exploration from the angle of Malagwane Special Crimes Unit (MSCU) and focusing on the murder mystery of the disappearance of residents and connecting these with the past and its subsequent influence in solving the mystery many years later. This creative process was by far the most impactful in highlighting the fluidity of the process and the importance of not obstinately holding onto concepts that did not work for the type of story being told.

Another equally important lesson that was dispelled was discovering how the assumptions I had were dispelled or altogether changed. Initially, I thought Twine would be easier to author a story for, as long as there is a solid story to be told. What ended up happening was discovering that too much text did not work for the type of story written and that instead it had to be chopped in favour of more fast-paced action-oriented succinct text that drove action forward. I found the same to be applicable for Ren'Py. This lucid realisation paints a picture about the correlation between action-oriented pacing and interactivity and the agency these platforms afford the user to a greater degree through the actions they take.

I thought Ren'Py would be so incredibly difficult to work with as a platform due to lack of experience with the platform, but was pleasantly surprised during the process that Ren'Py produced a pleasurable experience throughout the creative process, albeit a few frustrations in parts, but by and large enriching experience. The website creative process was fun to explore, especially as far as choosing the right theme to portray *Malagwane Ruins Odyssey*. It was, admittedly, incredibly frustrating because initially I wanted to find a storytelling plugin that would allow a vast array of functionalities, but when that did not come to fruition, decided to make do with what was available and create a compelling story using the affordances of the medium.

This section explored both the end user tenets and author tenets and reflected on how each of these tenets was prioritised at varying stages of the creative process and the subsequent decisions that influenced the story and how it was created. The

final section of this research is the conclusion, which wraps up the research and offers some recommendations for future study.

SECTION 5: CONCLUSIONS AND RECOMMENDATIONS

The research explored the inception of the world wide web in the 90s which was the genesis for the area of interactive digital storytelling mediums and the subsequent explosion of digital storytelling platforms and creative approaches to online storytelling through computer-mediated platforms and Human-Computer Interactions (HCI). In bringing the various mediums where digital interactive storytelling is incorporated, this highlighted the infiltration of digital interactive storytelling in many areas and industries such as web comics, journalism, in the academic spaces and in interactive fiction storytelling.

Teasing apart the various concepts around the area of digital storytelling, the focus area of the research centred on creating interactive fiction as a medium of digital interactive storytelling through a creative practice approach that sought to explore the framework of interactive fiction narrative construction underpinned by two sets of tenets – end-user tenets and author/creator tenets. The end-user tenets were underpinned by the framework of Heyes (2014) who posit that digital interactive storytelling is embodied by the four tenets Immersion, Interactivity, Integration and Impact. These, he reinforced, are the pinnacle of interactive storytelling, without which the veracity and body of work of this field would not be fully determined. Kim, Moon and Han (2011) bring to the fore the framework from which I parsed the author tenets that underpin interactive storytelling; Narrative Structure, Authoring Tools, Interface and Output Media. I combined all the tenets to add to the holistic lens of interactive storytelling on computer-mediated platforms Twine, Ren'Py and Website.

Central to the core of the research was conducting this process as a form of knowledge production for the creative fiction stories on the three platforms and not per se for the formal publication of these stories. The analysis of this creative process was to determine how the tenets are utilised in these platforms for both the end-user who is a viewer/player/consumer immersed in the storyworld and for the author/creator who is involved in the process of creating the story within the ambit of the affordances of each platform and how these affordances make allowances for particular effects, outcomes and outputs.

Throughout the creative process, it became abundantly clear for each platform that certain tenets were prioritised more than others. Twine prioritises interactivity as its core end-user tenet, without which Twine would be bereft of a platform tool that facilitates the production of multi-branching nonlinear narratives. The creation of links within its story editor is the very fabric of the interactivity the user explores and experiences when interacting with Twine. From the author/creator perspective, Twine provides an easy-to-understand platform which is packed with different story formats that are used depending on the experience level of the author with the platform and based on the output format and functionality the author seeks. For instance, Harlowe is a story format which was designed with the novice author in mind who knows zero iota of coding and is new to Twine. As a result, the input command elements are limited and not as diverse as a story format like Sugarcube which is a median/middle-of-the-road story format which still affords the novice creator a platform to explore, but with more functionality and configuration elements. This was explored in more detail in Section 3 in the creative practice making section.

All this said, immersion too is a tenet prioritised by Twine. The direct interactivity of the platform through links provides an immersive experience that induces agency on the part of the user to influence the trajectory of the story forward. Links in Twine are central in building elaborate choices for users to interact with in a story. The author has a legion of options to play around with the choices in the platform by being cognisant of the constraints the system provides through its inbuilt constructive elements and how this system gives them a level of carte blanche in creating as many choices as a story permits. Immersion is aided by the interface through its output format of printing files in HTML which can be viewed in different browsers of choice.

It was an interesting experience throughout the creative process to determine how the three different platforms prioritised tenets differently. Ren'Py prioritises immersion as a primary core tenet, for through the immersive experience via the aesthetically designed interface, the user/player is drawn to the kaleidoscope of immersive experience through visual immersion, aural immersion and physical immersion and being transported into a simulated world. Interactivity and integration are also integral to Ren'Py in the seamlessness of the various output media formats and how they interplay into the presentation of the story; how audio, images, sound

effects and text form a seamless presentation for the story. For the author, while initially Python as an input language can seem daunting, with more understanding, it becomes easier to navigate. The website, by design, prioritises immersion and interactivity through text and media formats such as images. The accompaniment of images in the medium add to the aesthetic of the platform. The interface of the website which provides ample white space adds to a ‘clean’ finish that gives it a neat look-and-feel end product. For the novice author, the best way to create a website without coding knowledge is to choose a specific theme that is inbuilt with certain functionalities that make it easier for the author to customise the website to their desired effect. This, admittedly, can be frustrating, as not all elements can be rendered this way and for more advanced content, coding knowledge would be required to add certain information that is not inherent to the theme.

For further recommendation and exploration, all three platforms are worth further exploration. They all presented intriguing processes that would warrant further analysis for future work. I was particularly fascinated by Ren’Py and Twine from an input editor command perspective and fascinated with the website from a user interface and experience perspective. Ren’Py offers a rich repository of input command elements through Python such as animation effects, transitions, the character per second effect which commands text to be typed in real time for the user. The website offers a rich user experience and user interface output end result. The scores of designs that facilitate aesthetically appealing outputs lend itself well in drawing in users to a website.

My overall impression with all three platforms is that the creation of interactive fiction to explore the narrative construction of these mediums was scratching the surface of complicated systems, which, upon further time and dedication employed to these, would yield even much more comprehensive results and comparative analysis. I acknowledge that were I an expert in the software development field, more features would have been explored to unlock the full scope capabilities of these mediums and how they compare and utilise the tenets in aspects not explored by this research. For further exploration, I am especially interested in exploring Ren’Py and Twine further to maximise on the capabilities of these two mediums.

LIST OF REFERENCES

Aarseth, E. J. (1997). *Cybertext: Perspectives on Ergodic Literature.* Baltimore, Maryland: The John Hopkins University Press.

Arrow, M. (2016, May 31). *Immersive storytelling is everywhere and there's no going back*. Retrieved from The Guardian: https://www.theguardian.com/media-network/2016/may/31/immersive-storytelling-360-vr-technology-marketing

Barber, J. F. (2016). Digital storytelling: New opportunities for humanities scholarship and pedagogy. *Cogent Arts & Humanities, 3*(1), 1-14. doi:10.1080/23311983.2016.1181037

Bashova, K., & Pachovski, V. (2013). Visual novel. doi:DOI: 10.13140/RG.2.1.5007.6405

Batinić, J. (2016). "Enhanced Webcomics": An Exploration of a Hybrid Form of Comics on the Digitatl Medium. *Image & Narrative, 17*(5), 81-90.

Bernstein, M. (1998). Patterns of Hypertext. *HT98: The Ninth ACM Conference on Hypertext and Hypermedia* (pp. 21-29). New York: Association for Computing Machinery. doi:https://doi.org/10.1145/276627.276630

Bernstein, M. (1999). Structural Patterns and Hypertext Rhetoric. *ACM Computing Systems, 31*(4es), 1-6. doi:https://doi.org/10.1145/345966.346011

Bernstein, M. (2009). On Hypertext Narrative. *Proceedings of the 20th ACM Conference on Hypertext and Hypermedia* (pp. 5-14). HT'09. doi:10.1145/1557914.1557920

Bold, M. (2016, June 16). The return of the social author: Negotiating authority and influence on Wattpad. *Sage Journals*, 117-136. doi:10.1177/1354856516654459

Borgdorff, H. (2006). The debate on research in the arts. Retrieved from https://www.ahk.nl/fileadmin/download/ahk/Lectoraten/Borgdorff_publicaties/The_debate_on_research_in_the_arts.pdf

Bostan, B., & Marsh, T. (2012). Fundamentals Of Interactive Storytelling. *Academic Journal of Information Technology, 3*, 20-42. doi:10.5824/1309-1581.2012.3.002

Candy, L. (2011). Research and Creative Practice. In L. Candy, & E. Edmonds, *Interacting: Art, Research and the Creative Practitioner* (pp. 33-59). Libri Publishing UK.

CERN. (2018, November 5). *A Short History of the Web*. Retrieved from CERN: https://home.cern/science/computing/birth-web/short-history-web

Chibana, N. (2015, July 24). *10 Mind-Blowing Interactive Stories That Will Change the Way You See The World*. Retrieved from Visme: https://visme.co/blog/10-mind-blowing-interactive-stories-that-will-change-the-way-you-see-the-world/

Cox, E. (2018, January 23). *Digital storytelling: The rise of multimedia journalism*. Retrieved from Medium: https://medium.com/@EmilyJeanCox/digital-storytelling-the-rise-of-multimedia-journalism-30435179b00c

Engström, H. (2019). ‘I have a different kind of brain’—a script-centric approach to interactive narratives in games. *Digital Creativity*, 1-22. doi:10.1080/14626268.2019.1570942

Ferns, S. (2020). Digital/Interactive Storytelling for Education; Using Twine. In S. Ferns, *TECHNOLOGY TOOLS FOR TEACHING IN HIGHER EDUCATION, THE PRACTICAL HANDBOOK SERIES.*

Friedhoff, J. (2014, August). Untangling Twine: A Platform Study. *DiGRA '13 - Proceedings of the 2013 DiGRA International Conference: DeFragging Game Studies, 7*.

Heyes, S. (2014, June 11). *8 Million Stories: Epic tales of building brand affinity*. Retrieved from MarketingWeek: https://www.marketingweek.com/8-million-stories-epic-tales-of-building-brand-affinity/

Heyes, S. (2014, March 18). *The Four I's of Digital Storytelling*. Retrieved from 8 Million Stories: https://8ms.com/blog/four-principles-digital-storytelling/

Host Africa. (2022, May 4). *domains explained: the complete guide*. Retrieved from Host Africa: https://www.hostafrica.co.za/blog/domains/domains-explained

Hutcheon, L., & O'Flynn, S. (2013). HOW? (Audiences). In L. Hutcheon, & S. O'Flynn, *A Theory of Adaptation* (pp. 113-139). London and New York: Routledge.

Huynh, M. (n.d.). *THE BOAT (INTERACTIVE WEBCOMIC)*. Retrieved from Matt Huynh: http://www.matthuynh.com/comics-2#/the-boat/

Kim, S., Moon, S., & Han, S. (2011). Programming the Story: Interactive Storytelling System. *Informatica*(35), 221-229.

Klaebe, H., & Hancox, D. (2017). Transmedia Storytelling. *Oxford Bibliographies*. doi:DOI: 10.1093/OBO/9780199756841-0174

Koenitz, H. (2015). Towards a Specific Theory of Interactive Digital Narrative. *ResearchGate*. doi:10.4324/9781315769189-8

Lang, M., Laing, C., Moules, N., & Estefan, A. (2019). Words, Camera, Music, Action: A Methodology of Digital Storytelling in a Health Care Setting. *International Journal of Qualitative Methods*, 1-10. doi:DOI: 10.1177/1609406919863241

Lynch, S., Charles, F., Pedersen, K., & Hargood, C. (2019). M22 - A Modern Visual Novel Framework. *NHT '19: Proceedings of the 8th International Workshop on Narrative and Hypertext* (pp. 9-13). Association for Computing Machinery. doi:https://doi.org/10.1145/3345511.3349284

Mason, S. (2013). On Games and Links: Extending the Vocabulary of Agency and Immersion in Interactive Narratives. Interactive Storytelling. *Academia.edu*, 25-34. doi:https://doi.org/10.1007/978-3-319-02756-2_3

Matharu, T. (2017, October 23). *From writing online to a publishing deal: meet six Wattpad sensations*. Retrieved from BookTrust: https://www.booktrust.org.uk/news-and-features/features/2017/october/from-writing-online-to-a-publishing-deal-six-wattpad-sensations/

Mignolo, W. D. (2009). Epistemic Disobedience, Independent Thought and Decolonial Freedom. *Theory, Culture & Society, 26*(7-8), 159-181. doi:10.1177/0263276409349275

Murray, J. (2011). *Glossary*. Retrieved from inventingthemedium: https://inventingthemedium.com/glossary/

Nisi, V. (2017). The changing panorama of interactive storytelling: a review from locative to transmedia. *DOC online - Revista Digital de Cinema Documentário*, 43-68. doi:10.20287/doc.esp17.dt02.

Riedl, M., & Bulitko, V. (2013). Interactive Narrative: An Intelligent Systems Approach. *AI Magazine, 34*, 67-77. doi:10.1609/aimag.v34i1.2449.

Roth, C. (2015). *Experiencing Interactive Storytelling.* PhD Thesis, Amsterdam: VU University.

Roth, C., & Koenitz, H. (2016). Evaluating the User Experience of Interactive Digital Narrative. *Proceedings of the 1st International Workshop on Multimedia Alternate Realities.* doi:10.1145/2983298.2983302

Severance, C. (2015). Guido van Rossum: The Early Years of Python. *Computer, 48*(2), 7-9. doi:10.1109/MC.2015.45

Shenron. (2010, March 17). *History of the Internet*. Retrieved from History of Things: http://www.historyofthings.com/history-of-the-internet

Skains, R. L. (2018). Creative Practice as Research: Discourse on Methodology, Media Practice and Education. *Journal of Media Practice*, 82-97. doi:10.1080/14682753.2017.1362175

St. Laurent, A. M. (2004). *Understanding Open Source and Free Software Licensing: Guide to Navigating Licencing Issues to Existing and New Software.* O'Reilly Media.

Techopedia. (Updated 2020, August 12). *Website*. Retrieved from Techopedia: https://www.techopedia.com/definition/5411/website

Techopedia. (2012, November 3). *Hypertext Transport Protocol Secure (HTTPS)*. Retrieved from Techopedia: https://www.techopedia.com/definition/5361/hypertext-transport-protocol-secure-https

Twinery. (n.d.). *Twine is an open-source tool for telling interactive, nonlinear stories*. Retrieved from Twinery: https://twinery.org/

Wibowo, I. (2021, December 21). *CMS Market Share*. Retrieved from ToolTester: https://www.tooltester.com/en/blog/cms-market-share/

WordPress.org. (n.d.). *Our Story*. Retrieved from WordPress.org: https://wordpress.org/about/

WPBeginner. (2020, January 14). *What is: cPanel*. Retrieved from WPBeginner: https://www.wpbeginner.com/glossary/cpanel/

Yamin, M. (2019). Information technologies of 21st century and their impact. *Springer*, 759-766. doi:doi.org/10.1007/s41870-019-00355-1

APPENDICES

INITIAL STORY MAPPING CONCEPT BEFORE FINAL AMENDMENT

Story Idea Concept

Genre: Investigative and Adventure

Title: Malagwane Ruins Odyssey (Short story)

Key story elements

Characters

Main Characters - All female characters:

Detective Tengetile AKA TenG



Detective Senzi AKA Sandz



Deputy Chief Tandi



Name	Tengetile aka TenG
Ethnicity	Black Swazi Citizen
Height	1.70m tall
Occupation	Detective, MSCU
One-line descriptor	“Dude, shit is about to go down, let’s hightail it before we are found.”
Relationship status	In relationship with Sandz
Gender	Nonbinary, Nonconforming
Sexual Orientation	Lesbian/Gay
Background	Middle class, conservative family, grew up in Makotasi Malagwane, travelled the world and came back to hometown

Name	Senzi aka Sandz
Ethnicity	Black German Citizen

Height	1.62m tall
Occupation	Detective, MSCU
One-line descriptor	“You said whaaat? I’m in, let’s do this. We will go down in history for being brave stalwarts.”
Relationship status	In relationship with TenG
Gender	Cisgender woman
Sexual Orientation	Lesbian/Gay
Background	Upper class, liberal atheist family, grew up in Germany, moved to Makotasi, Malagwane after getting job with Malagwane Special Crimes Unit (MSCU)

Name	Tandile aka Boss Tandi
Ethnicity	Black South African Citizen
Height	1.60m tall
Occupation	Deputy Chief, MSCU
One-line descriptor	“We are here to enforce the law, not to make friends.”
Relationship status	Unknown – She is that secretive
Gender	“Who cares about such things, man”
Sexual Orientation	Loading….
Background	Middle class, liberal family, grew up in Johannesburg and then moved to Makotasi Malagwane after getting job with Malagwane Special Crimes Unit (MSCU)

Character Names

1. Malagwane Special Crime Unit (MSCU) Characters
- Detective Tengetile aka TenG
- Detective Senzi aka Sandz
- Deputy Chief Tandi

2. MaRu Empire Characters

- Queen Sikhalo - prominent queen ruler from the 60s who ruled with an iron fist
- Queen Katana - Queen Sikhalo's wife and ruler of Malagwane Empire who disappeared and has never been located
- Jana - Katana's right-hand woman
- Luyanda - Sikhalo's right-hand woman

Outline and Mapping

Story outline

Sandz and TenG are a (lesbian/gay) couple who are working as detectives for Malagwane Special Crimes Unit (MSCU).. They were tasked by the department to investigate the disappearance of several residents of Makotasi in Malagwane. There are rumours that residents are disappearing in Malagwane Ruins (MaRu) in a quest to find hidden treasures.

Setting

Malagwane, Mbabane Swaziland (Eswatini) and Malagwane Ruins in Malagwane Hill.

Conflict

The disappearance of Malagwane residents after it is rumoured that they are disappearing in a quest to find hidden treasures of gold long thought buried in Malagwane Ruins (MaRu) after Queen Sikhalo and Queen Katana's reign which began in the 80s and ended in the early 2000s.

Resolution

Solving the MaRu mystery in tandem with the mysterious disappearance of Queens Sikhalo and Katana.

Detailed Outline/Mapping

Malagwane Empire from the 80s to early 2000s

- Ruled by Queen Sikhalo and Queen Katana who ruled with an iron fist, no-nonsense type of rulers
- They made great strides in improving the way of life of her people
- They were feared as much as they were revered

- They ruled for 20 years before they mysteriously disappeared
- Inquiries were made into their disappearance, till to date, no one knows what happened
- Their subsequent disappearance led to the looting of numerous resources and commodities such as gold, silver, copper and diamonds
- A riot ensued that ended in a raging war that wiped out the Queendom of Malagwane Empire
- Reparative measures to restore its former glory, but to no avail. What is now called Malagwane Ruins emerged after the devastation of a plush vibrant empire
- What is left now is a few upstanding edifices while the rest are ruins. One of the remaining buildings is MaRu Castle which, though partially destroyed, remains standing
- Said ruins were built and fortified with Fort Knox type security and underground passageways that have not been affected by the war

Malagwane Ruins Present Day

- What remains of Malagwane Empire are ruins that are a source of tourist attraction with their renaissance era style buildings that were heavily influenced by New Renaissance and Baroque architectural techniques (not sure if this needs to be explained – will do so if need arises, but might need to describe them all the same)
- MaRu is being rumoured to have some of the gold, silver and other precious minerals hidden in the basement vaults
- Residents of Makotasi have been disappearing, rumoured to be in search of said metals and they don't come back from their quest
- What happens to them? Where do they disappear to? No one who has gone in search of these has come back

Type of story quest

- Malagwane Special Crimes Unit (MSCU) team find clues that lead them to getting closer to solving the mystery of the disappearance of residents in Makotasi
- Everything leads back to the subsequent demise of Malagwane Empire, and in order for team to solve mysteries, they have to make a connection with where it all began, or rather, how the unfolding of events resulted in MaRu being what it is today

How it all starts

- Boss T gets a frantic anonymous call from a stranger who says they have intel on the disappearance of residents but asks that she only chooses people she can trust to work with her as the information is delicate/sensitive/pricey to the wrong people

- In tandem with the call, news of the disappearance of Makotasi residents start getting more traction in the media with numerous citings made at the entrance of MaRu castle, but with no exit made by whoever goes into the castle (Castle has three main wings; Davela Wing, Zathola Wing and Sivalo Wing – map out in detail in worldbuilding)
- A citing of a dead resident at Zathola Wing was found upon further investigation by MSCU team. How did he die? Who killed him? What got him killed?

Worldbuilding

Primary locations:

- MSCU - Malagwane Special Crimes Unit
- Makotasi Suburbs
- Malagwane Ruins (MaRu) Castle
    - Three wings; Davela, Zathola, Sivalo - with an overarching dome-shaped rooftop on all three wings and skyline atop walkway between wings (will provide sketch of schematics)
    - MaRu Covert Op Room (hidden basement with high-tech, high clearance security)
    - Basement X has state-of-the-art tech and a whole underworld that was hitherto undiscovered.

****

Scene 1: Malagwane Explorers Headquarters, Boss Tandi's office

Boss Tandi: TenG, Sandz, my best duo (don't tell the others you're my favs), we have serious business to attend to. As my two sharpest tools in the shed, I am tasking you with a delicate matter. **scratches the back of her neck as she tries to find the best way to explain this rather 'delicate matter' **. Do you recall the brouhaha about Queen Sikhalo's reign in the 50's and how that ruffled more than a few feathers, got people arrested, inquiries lodged...what a mess that was!

TenG: I could never forget. I obsessed over this, poured over details, and kept on thinking there was something I was missing.

Sandz: Yeah yeah TenG, you just have a massive crush on Queen Sikhalo. I mean, that pic of hers you have on your bedroom wall says a lot huh.

TenG: As if you don't have a crush on Luyanda. The way you gush over her, oh gosh, can't deal.

Boss Tandi: Oh you two, what to do with you. You know what will get you closer to solving this mystery? Getting on with it. As I was saying… the mysteries behind Queen Sikhalo's reign are important in unravelling the disappearance of residents.

Sandz: Let me see if I'm following here, you sound sure that the mystery behind Makotasi residents disappearing has ties with MaRu and Queen Sikhalo. What makes you sure, boss?

Boss Tandi: Patience Sandz, I am getting to that. Before I get into the serious stuff, a cup of coffee is in order.

Scene 2: Malagwane Ruins Covert Op Room 10101

Jana: Eish boss…

Katana: Don't eish me wena. I know what you will tell me; you can't find her. You can't find her?! **frothing at the mouth with rage**

Jana: I'm sorry boss, we looked everywhere, no one seems to know where she is.

Katana: Hhayi bo! You cannot come to me with this nonsense. What do you mean you haven't found her? You know the ramifications of such a heinous lie coming out to the public? No no no, I think you need a reminder, you seem to have clouded your head with all these fantastical ideas. Go find her…NOW!

***

Later that same day….

Scene 3: Queen Sikhalo and Luyanda Cabin – Siteki Residence

Queen Sikhalo: We need to get rid of the sludge. They are getting closer, we need to act swiftly, painlessly (well, I mean, by my standards, hehe), fast. Get the inventory, let's prepare.

Luyanda: Gosh, Sikz , you already know I keep these up to date and obsess over which ones are the most lethal. You know how thorough I am.

Queen Sikhalo: Of course I know this, always prepared, you are * winks at her* . Now, let's talk supply. We need more, we need to get Marina, Osa and Rea to move fast. Let's contact them. We need to take stock of what we can control and make contingencies.

Luyanda:.

****

To add to story elements – Creative Process Notes

Queen Sikhalo and Queen Katana

- Betrayal by Queen Katana that is rumoured to have catapulted the subsequent demise of MaRu Empire.

- What betrayal was this that led to the tragic breakup of two powerful queens? What soured their relationship? [[Note to this that this was the initial creative process before I decided to make them married and rule side by side instead of being arch enemies, as originally intended]]

Betrayal

- Growing feud with rulers Nerima and Osako of Mbabane Empire who were gaining momentum and power. What did they have over Katana who risked everything for her queendom?
- Turns out that Katana's father was a dirty wheeler and dealer who has committed atrocious murders and was a spy for Eswatini Bureau of Investigation (EBI). In a cruel twist of fate, he was responsible for the atrocious murder of Sikhalo's 4 relatives (two aunts and uncles). When Katana got this info, it was enough blackmail and anguish to distance herself from the empire and that led to the perception of weakness with one queen down. That's when insurgents and others infiltrated what was thought to be previously airtight

Queen Katana has been looking for Queen Sikhalo for years since her disappearance. She wants to apologise deeply for the destruction she left in her wake and wants to explain to her everything that happened and why she took the route she did. She is not even looking for Sikhalo to take her back, but wants forgiveness for the carnage left in the wake of her disappearance. [[This part of the story was not explored and scrapped out altogether. I am interested in exploring this in another version of this story in the future.]]

INITIAL MAPPING OF STORY BEFORE FINAL AMENDMENT

Chapter 1

Malagwane Special Crimes Unit (MSCU) Headquarters, Boss Tandi's office - Earlier in the day

"Dammit, this bloody coffee machine! When does it ever work when you need it to?" storms in a very tired Boss Tandi into her office, frustration permeating the air. If you look closely, you can see tiny beads of sweat on her brow. Tandi picks up the phone from her office and dials Detectives TenG and Sandz. A few minutes later TenG and Sandz are sitting opposite Boss Tandi. She takes a look at both of them, pauses for effect, with a noticeable glint of excitement in her eyes. "TenG, Sandz, my best duo (don't tell the others you're my favs), we have serious business to attend to. As my two sharpest tools in the shed, I am tasking you with a delicate matter." She scratches the back of her neck as she tries to find the best way to explain this rather 'delicate matter'.

"Do you recall the brouhaha about Queen Sikhalo's reign in the 50's and how that ruffled more than a few feathers, got people arrested, inquiries lodged...what a mess that was!" "I could never forget. I obsessed over this, poured over details, and kept thinking there was something I was missing." chimes in TenG excitedly. Sandz rolls her eyes and looks at TenG. "Yeah yeah TenG, you just have a massive crush on Queen Sikhalo. I mean, that pic of hers you have on your bedroom wall says a lot huh." "As if you don't have a crush on Princess Luyanda. The way you gush over her, oh gosh, can't deal." TenG says with a hint of jealousy. "Oh you two, knock it off," an exasperated Boss T shuts down that line of conversation. "As I was saying...the mysteries behind Queen Sikhalo's reign are important in unravelling the disappearance of residents."

Sandz looks at TenG and realises that they should focus more on the issue at hand, and instantly gets serious. "Let me see if I'm following here, you sound sure that the mystery behind Makotasi residents disappearing has ties with MaRu and Queen Sikhalo. What makes you sure, boss?"

"Patience Sandz, I am getting to that. Before I get into the serious stuff, a cup of coffee is in order. I need proper coffee, not this coffee which is 50 shades of diluted. You can't even taste the coffee." She calls the receptionist and asks her to bring coffee from Cafe De Lucca next door.

While Boss T waits for coffee from Cafe De Lucca, she recounts the details to Detective TenG and Detective Sandz.

****

Early in the morning around 07:10 a.m. - Boss Tandi's Office

Deputy Chief Tandi has been the Deputy Chief of MSCU for four years now. She reflects as she reminisces about how she got the position to fill in the shoes after the resignation of Deputy Chief Phumzile who was notorious for unorthodox dealings. Former DC Phumzile is suspected of leaking information to Queen Katana, but with no proof, these are but allegations. The animosity and bad taste this has left in the Department has meant that DC Tandi (affectionately called Boss T by her team) has had to tighten the reins and shape up the MSCU ship.

A sharp shrill sound interrupts her out of her reverie. “Dammit, this loud phone,” she mutters to herself. “Tandi, hello.” “Just who I am looking for. You want to solve the matter of disappearing Makotasi residents. You no doubt have many questions and I so happen to know you have not made some headway with your investigation yet. Without giving too much away, to solve this mystery, look into the disappearance of Queen Sikhalo and the Malagwane Ruins Empire. It is all connected.” a strong coarse deep female voice on the other end of the line. “Who am I speaking with?” “That’s not important for you to know. What’s important is knowing that these incidents are not isolated. Look into MaRu Empire and you will solve your mystery.” The line cuts and the anonymous speaker drops the phone.

“I’ll be damned!” Boss T thinks to herself as she stands up and looks at the chart on the far left of her office and tries to make connections. Several crime scene photos are pinned on the chart. Five Makotasi residents had been reported missing and three found dead at Malagwane Ruins (MaRu) Castle. Two weeks ago, rumours of disappearing residents started spreading. The first sighting of a dead resident was made by an anonymous caller who called MSCU. News of the disappearance of Makotasi residents started getting more traction in the media with frequent sightings made at MaRu castle’s Davela and Sivalo wings.

Boss T recalls when Detective TenG recounted the frantic phone call she received two weeks ago.

Flashback - Two weeks ago - MSCU Headquarters

Detective TenG is sitting in her office and ruminating over the argument she had with her partner and lover Detective Sandz. “I am not comfortable with the way the two of you interact. Why must you be the first person Rea calls when something wrong happens in her life? I know that exes can be friends, but this seems too close to comfort for me. It just feels like lately there have been frequent calls and ‘rescue-me’ missions that you must perform for her. Surely she has other people she can lean on. Why must it be you?” an agitated TenG paces up and down the living room. She momentarily looks at a beautiful, framed photo of the two of them placed on top of the fireplace mantel that they took at a vacation in Phuket Thailand. A picturesque picture with a background of the sea and mountain ranges spanning across a vast landscape. In the photo, they are looking into each other’s eyes, holding hands, happiness abound. TenG can’t help but smile as she recalls this day. “Babe, don't you trust that nothing will happen with Rea? It feels like you are doubting how I handle myself around her. She is my ex for a reason. I

am with you now and would not jeopardise what we have. You are the love of my life baby, don't ever doubt that." "I don't doubt your love for me or what we have. I just worry that she is overstepping boundaries and that if it's not addressed, it will interfere with our relationship." "I will address it with her my love." Sandz says as she takes TenG's hand and pulls her into a hug.

Her thoughts are interrupted when her landline rings. "TenG, hello." "Hello. There's a dead body here. Oh my word, it's so bad. There is blood everywhere," responds a very frazzled caller. "Where are you right now?" "I am at MaRu castle at Davela Wing. I was walking around the corner by the courtyard when I saw a terrible sight in front of me. A dead body that has been battered beyond recognition. Oh gosh, it's terrible," caller sniffles in the background. "Thanks for alerting us."

TenG immediately informs her partner Sandz about the call. They immediately spring into action and contact Boss T and inform her of this development.

At MaRu castle by Davela Wing courtyard, it's a flurry of activity as MSCU crew and forensic team work on the crime scene. "Oh shit, the body is mangled. This is brutal. Whoever did this wants to send a message. The arms have been completely severed, torn ligaments. What I'm trying to understand is why this body was dumped here. It is clear that Jane Doe was murdered somewhere else and then dumped here." Sandz talks to TenG and makes notes about her findings. "It is baffling. What I keep thinking about is that if we want to know what is happening here, we need to make the connection to Malagwane Empire and how this relates to the murder." TenG responds as she goes over the body for more clues. She makes notes and then both she and Sandz leave the crime scene.

Over the next coming days, four more murders are reported, with two of these found at the entrance of Davela Wing and the other two in Sivalo Wing.

Present Day - MSCU Headquarters - Boss T's office

"It is worrying that there has been five murders in a span of two weeks. Whoever is behind this is drunk on their power to agitate and send a very clear message that we are too slow to figure it out, " Boss T grimaces as she looks at the grisly crime scene photos. "Okay, so from what we know thus far, four of the murders have the same M.O - mangled body parts that are beyond repair; severed arms, cut torsos and they have been branded with this peculiar looking mark on their left leg." TenG notes. "We should have this zoomed in so we can see what the branded mark is and whether we can make any associations based on it." Sandz takes two of the pictures pasted on the wall and gets out of the office to get assistance from Ramisto, the tech guru in the office.

****

"Ramisto the maestro." "Wu Sandz, what am I being bribed for now?" Ramisto rolls his eyes good naturedly. Ramisto is a happy go-lucky 30-year-old 'techie' who prides himself with finding anything that needs to be found. By his own assertion, his work is second to none (arrogant much, huh). The maestro does not fit the 'stereotypical' lens through which IT specialists are grouped. He is a lanky tall guy with a trimmed

moustache which he touches constantly, especially when he is deep in thought or when agitated. He loves formal wear and is always donning a suit and tie. He says it gives him a serious ‘don’t-fuck-with-me’ look.

“Ah maestro, Ramisto Lamisto, woohoo, I got something for you, man.” Sandz exaggerates as she pulls a chair next to Ramisto and sits next to him. “Ooh let’s get this shandis going. Watchu have for me bruh?” Ramisto responds excitedly as he readies himself for the big reveal. “I’m sure you’ve heard about the gruesome murders of Makotasi residents.” “A dastardly thing to do to our own residents. I am always unnerved by the cruelty of the people around us. Like, you could be breaking bread with your neighbour and they become the next killer.” He shakes visibly as he says this. “Tell me about it man, gruesome stuff. These images here…can you see the branded mark on the left leg of each image? We can’t identify it properly and we think it can be a clue to uncover who is possibly behind these murders. I mean, why brand the bodies, what message are they trying to send us?” Sandz passes on the images to Ramisto. “Ramisto at your service.” said with a glint in his eye “Can you email me some of these images?” “Gotcha! Thanks man, will hear from you once you’re able to make head or tail of this rather peculiar symbology.”

Meanwhile, Boss T and TenG are in what seems to be a deep-seated conversation about Makotasi residents. “…and that is how people got divided into two factions of sorts, ” finishes off Boss T. “What did I miss?” Sandz comes in, sits next to TenG, both of them facing Boss T. “Right on time Sandz. TenG and I were making ties to how the demise of the MaRu Empire caused a massive rift between those who were pro both Queen Sikhalo and Queen Katana and those against. It seems those who were against Sikhalo and Katana’s regime felt like they were too tight with the reigns and instituted rules which subsequently affected how the city years later is run. For us to find our answers and how it ties in, we need to understand how this rift affected people after the crumbling of the empire. We know for a fact through the anon call that the brutal murders are linked to the empire. Now we just need to piece this together. The two of you need to move fast, go to the residents, go to MaRu castle and blow a lid on this whole thing. For that matter, what the hell happened to both Queen Sikhalo and Queen Katana? What happened to Luyanda? Their mysterious disappearance can shed some light into this whole mess we are in.”

Chapter 2

Malagwane Ruins Castle from 1980 to year 2000 under the reigns of Queens Sikhalo and Katana - 20 Year Reign

The people of Malagwane are divided about their perceptions of both queens. Some are championing for them and rave about how the Malagwane community has modern state-of-the-art infrastructure, the quality of life has drastically improved from before their reign. Communities in Malagwane like Makotasi and Fairview have seen immense

improvements in infrastructure and economic benefits for the people. Those who are in camp Queen Sikhalo and Queen Katana happily talk about the brilliance of these rulers and how having two women on the throne is a welcome difference as opposed to neighbouring Mbabane Empire which is ruled by ruthless leaders King Nerima and Queen Osako who are known for using brute force to intimidate and get their way.

What is fascinating is that through the years, many people have tried to cause harm to the queens, without avail. What they fail to understand is how they have such tight security and have trusted advisors and armed forces who are trained to protect them at all costs.

The naysayers who are vocally against the queens have been known to be bitter about how Malagwane Empire is ruled by women. It is unbecoming, they posit, because many empires have had men at the helm. "How dare women think they can dictate to us and tell us what to do," one male resident of Makotasi was heard speaking bitterly while drinking with his friend at the Marola Bar in Makotasi. "Mxm, tell me about it. What nonsense is this. Next thing they will tell us to dress like women, mark my words. I'm so tired of this nonsense. If I could, I would relocate to Mbabane and have better chances under the leadership of King Nerima." His friend responds with venom. "Ah, you have both started with your nonsense. How many times must we hear about your hatred for our queens. Is our quality of life not better than it is in Mbabane? Don't let them fool you, we have it better this side," responds Joe the bartender. He is quite frankly tired of hearing the same nonsense being spewed day after day. He has a sinking feeling in his heart that the luxuries they enjoy will be tested.

Meanwhile at Malagwane Ruins Castle Covert Op Room 10101 -

A tall muscular and athletic Jana paces around the room as she is thinking of how to face Queen Katana. Not even a second later a very angry Katana comes into the room and bangs her hand on the table in front of Jana. “What do you mean you can’t find her?!! You cannot come to me with this nonsense!” “Eish boss…” Jana responds with a hint of fear.

“Don’t eish me wena. Get it done, do what I pay you to do and fucking find her.”" Katana is fuming, frothing at the mouth with rage. Jana winces at this display of ire. You would think she would be used to it by now, but she doesn’t get used to how different Katana is when she is pissed.

“I’m so sorry Jana.” She takes a deep breath, runs her fingers through her long jet black hair that has hints of grey. “I let it get the best of me sometimes and lash out at you. It’s just…it’s just been so long since I’ve seen her. I just want a moment with her to explain everything and for her to forgive me.” Her voice is raw with emotion and she steels herself to not show this kind of ‘weakness’ in front of Jana, her long-standing right-hand woman and confidant who has been with her through it all. Katana is filled with remorse

for how she has treated Jana over the years. She feels she is close to her breaking point and just wants to move on with her life and get some resolution.

She knows how it all started. Katana was never the same after she had to leave. She was prone to fits of frustration and anger because she and Jana had been looking for Sikhalo for years without making headway. Jana knows it's eating Katana up that she can't find her wife. They had employed many private investigators over the years, but to no avail, no one seemed to be able to locate the elusive Sikhalo. Some days Katana cannot bring herself to entertain the idea that maybe Sikhalo is dead and she will never see her again. Ever since she heard that her wife disappeared after the demise of Malagwane Empire, she has been looking for her. It's been 10 years. She is losing her mind. She needs to let go of this obsession that she will see her again.

"I want to have some resolution and move on with my life. Before I do that, let's look for her one last time and then if we can't find her, we can hang our boots." Katana looks at Jana with a sadness she had never displayed before.

***

Germany - Sikhalo Residence

" I have been mulling over this for years and I've come to the conclusion that it does not make sense for her to have disappeared without a compelling reason that jeopardized our marriage and empire. I have long stopped being angry and hurt, I just want to see her again, to hold her and to get some answers," Sikhalo looks at Luyanda, her trusted right-hand woman, with an expression of finality. "I am tired of commiserating, now it's time to spring into action. I know it's been ten years since I've seen her, since her disappearance, but my instinct tells me she is still alive. I need to know, I need to find her," Sikhalo responds with a hint of desperation in her voice.

Sikhalo reminisces about the times she and Katana ruled over Malagwane Empire. They were quite the pair, the two of them. They modernised Malagwane, developed state-of-the-art infrastructure and amenities, made big changes that Malagwane residents held in high regard. These were not without friction of course, and they had a long list of enemies who wanted to see their demise. Come to think of it, Sikhalo muses, no one wanted to see their downfall more than King Nerima and Queen Osako of neighbouring Mbabane Empire. They were well known for using intimidation tactics to get people to do their bidding.

TenG's Residence - Makotasi - Night time

"C'mon now love, you mean to tell me you're not fascinated about the legend of how surnames came to be abolished in our society? I mean, here I am wondering what surname I would be rocking right now had it not been for this ridiculous rule." Sandz playfully pats TenG's shoulder and smirks at her, sitting closer to her on the couch. "Think about it this way babe, our system is far more efficient. Imagine the nonsense of having to record so many long names and surnames. I'm for team efficiency all the way." TenG

winks at her and touches her arm. “I jest, I am fascinated. Do tell, Ms ‘I’d-be-rocking-my-surname’. I’m all ears.” TenG smoothes Sandz’s shirt collar and looks at it rather obsessively. “I washed it; I swear my love. It’s a little dirty, isn’t it?” “No babe, it’s not about the shirt. I’m thinking, why did Queen Sikhalo go to such lengths to abolish and obliterate so many of these rules like detergent? First, it was the surnames and then it was the *Battles of the Frontiers warriors* annual event. Her motivations intrigue me.” TenG responds pensively.

“You and me both mi amor. Someday we will get the answers. But for now, what bothers me is the sequence of events around the disappearance of our residents.” Sandz stands up from the couch and paces, stands still, picks up a document from the table of a file she had brought from the office earlier and continues, “Let me rehash for a moment - frantic call from anonymous caller who is by all accounts high stakes and can’t risk identification. Tells us to heed this because it will give us all the clues we need to solve the case, drops a bombshell on us that the answers we need are at MaRu Castle and then drops the call, just like that. Babe, I’m hella intrigued. Woohoo, let’s go on this mad chase.”

FINAL STORY: **Interactive Fiction Website Version**

MAIN CHARACTERS



Known for her affable persona, TenG is the 'life of the party' and can talk your ear off. Someone's gotta oil the wheels of conversation and lubricate the tension awkward-inducing moments. This 35-year-old has seen it all. Working as detective for Malagwane Special Crimes Unit (MSCU) for 5 years has exposed her to the good, the bad and the

ugly of humanity. How she still keeps her optimism badge is beyond Sandz, who, as her partner both at work and in life, has developed a much more cynical view of life.

Coming back to her hometown after years of studying and working abroad in cities such as New York, Berlin and London, to work for MSCU, she has developed a robust worldview that shapes how she processes the world around her and has been instrumental in her success as a detective for MSCU. Her middle class upbringing from a conservative family made her purge some of the restrictive stereotypes that were pervasive while growing up in Makotasi.

Years later after coming back to Makotasi, she is pleasantly surprised by how much has changed, and for the better.

Name	Tengetile aka TenG
Ethnicity	Black Swazi Citizen
Height	1.70m tall
Occupation	Detective, MSCU
One-line descriptor	“We will get to the bottom of this no matter what.”
Relationship status	In a 6 year relationship with Sandz
Gender	Nonconforming
Sexual Orientation	Calls herself a homosapien flaming homo
Background	Middle class, conservative family, grew up in Makotasi Malagwane, travelled the world and came back to hometown
Why TenG loves Malagwane	“It’s the people. They are the heartbeat of the city. I serve them with pride, even when dealing with them can be so frustrating. How can I forget the beautiful

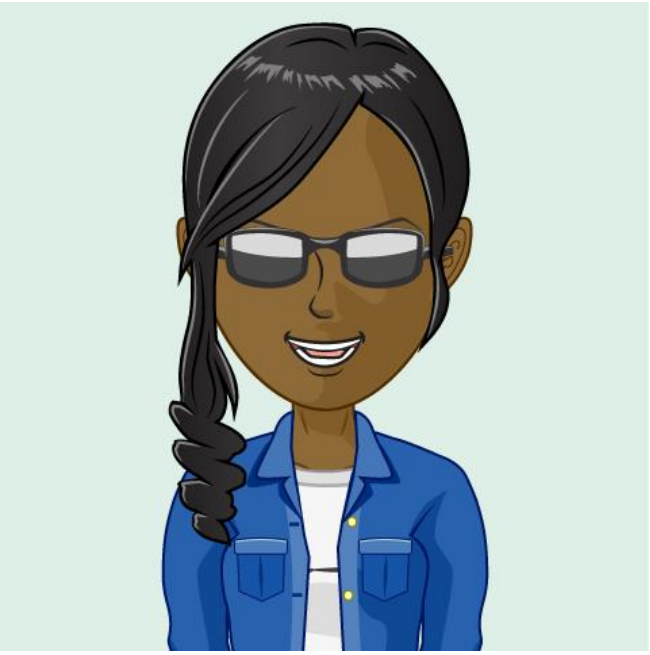
	mountains and mountain ranges that jut out of Malagwane like royalty.”



By her own admission, she is a daredevil who is a serial risk-taker who sometimes has a no-holds-barred approach to life and situations. Growing up in Berlin in an atheist family, religion doesn't have an influence in her life nearly as much as it does with TenG who grew up in a Christian environment. 34 years on this earth has seen her go through a series of mishaps and tragedies; from losing her mother to cancer, to being disowned by her father for being gay. She does not, for the life of her understand why her father is homophobic in a liberal environment. Even though she has adopted a somewhat cynical view, she still has some optimism that the people she helps through MSCU can find comfort and justice.

Name	Senzi aka Sandz
Ethnicity	Black German Citizen
Height	1.62m tall
Occupation	Detective, MSCU
One-line descriptor	*"Exciting shit! Let's get cracking!"*

Relationship status	In a 6 year relationship with TenG
Gender	Cisgender woman
Sexual Orientation	Prefers the word 'gay' to 'lesbian'
Background	Upper class, liberal atheist family, grew up in Germany, moved to Makotasi, Malagwane after getting job with Malagwane Special Crimes Unit (MSCU)
Why Sandz loves Malagwane	Amazing cool, hip and trendy watering holes. She has a regular bar called Faya that she and TenG love going to when they want to wind down.



Tandi has always wanted to be in the police force. She grew up in a family of law enforcement and has aspired to be the leading Chief of Police since she was a fledging youngin. Currently the Deputy Chief of Malagwane Special Crimes Unit, she takes her job seriously and has made some significant changes which put her in good stead for consideration for COP post. What people don't know about her is that beneath her

serious no-nonsense exterior and deadpan humour, she has a heart of gold and truly cares about the people she leads and the community she serves. Life has been rough on her. While she grew up in a middle class environment and was shielded from most of life's harsh and grating lessons as a child, unfortunately she was not spared in her adulthood. She had to fight tooth and nail to prove her mettle as a woman in positions of power.

When she is not in work mode, she loves collecting classical music vinyls and enjoys a glass of whiskey on the rocks and muses about life. No one is privy to her life beyond work; she prefers it this way, as she had learnt from the past that the less people know, the less they can use against you.

Name	Tandile aka Boss Tandi
Ethnicity	Black South African Citizen
Height	1.60m tall
Occupation	Deputy Chief, MSCU
One-line descriptor	"We are here to enforce the law, not to make friends."
Relationship status	Unknown – She is that secretive
Gender	"Why does it matter? It shouldn't. It's a hill I'm willing to die on."
Sexual Orientation	Loading....
Background	Middle class, liberal family, grew up in Johannesburg and then moved to Makotasi Malagwane after getting job with Malagwane Special Crimes Unit (MSCU)
Why Deputy Chief Tandi loves Malagwane	What's not to love? The people are the warmest she has ever come across

	(though she won't necessarily show them or tell them that), ample breath-taking scenery that gives her a peace of mind when she jogs along the beautiful streets of Makotasi, and ultimately, has avenues for hobbies and opportunities for growth.

Chapter 1

Malagwane Special Crimes Unit (MSCU) Headquarters, Boss Tandi's office – Earlier in the day

"Dammit, this bloody coffee machine! When does it ever work when you need it to?" storms in a very tired Boss Tandi into her office, frustration permeating the air. If you look closely, you can see tiny beads of sweat on her brow. Tandi picks up the phone from her office and dials Detectives TenG and Sandz. A few minutes later TenG and Sandz are sitting opposite Boss Tandi. She takes a look at both of them, pauses for effect, with a noticeable glint of excitement in her eyes. "TenG, Sandz, my best duo (don't tell the others you're my favs), we have serious business to attend to. As my two sharpest tools in the shed, I am tasking you with a delicate matter." She scratches the back of her neck as she tries to find the best way to explain this rather 'delicate matter'.

"Do you recall the brouhaha about Queen Sikhalo's reign in the 80's and how that ruffled more than a few feathers, got people arrested, inquiries lodged…what a mess that was!" "I could never forget. I obsessed over this, poured over details, and kept thinking there was something I was missing." chimes in TenG excitedly. Sandz rolls her eyes and looks at TenG. "Yeah yeah TenG, you just have a massive crush on Queen Sikhalo. I mean, that pic of hers you have on your bedroom wall says a lot huh." "As if you don't have a crush on Queen Katana. The way you gush over her, oh gosh, can't deal." TenG says with a hint of jealousy. "Oh you two, knock it off," an exasperated Boss T shuts down that line of conversation. "As I was saying…the mysteries behind Queen Sikhalo's reign are important in unravelling the disappearance of Makotasi residents."

Sandz looks at TenG and realises that they should focus more on the issue at hand, and instantly gets serious. “Let me see if I’m following here, you sound sure that the mystery behind Makotasi residents disappearing has ties with MaRu and Queen Sikhalo. What makes you sure, boss?”

“Patience Sandz, I am getting to that. Before I get into the serious stuff, a cup of coffee is in order. I need proper coffee, not this coffee which is 50 shades of diluted. You can’t even taste the coffee.” She calls the receptionist and asks her to bring coffee from Cafe De Lucca next door.

While Boss T waits for coffee from Cafe De Lucca, she recounts the details to Detective TenG and Detective Sandz.

****

Early in the morning around 07:10 a.m. – Boss Tandi’s Office

Deputy Chief Tandi has been the Deputy Chief of MSCU for four years now. She reflects as she reminisces about how she got the position to fill in the shoes after the resignation of Deputy Chief Phumzile who was notorious for unorthodox dealings. Former DC Phumzile is suspected of leaking information to Queen Osako of Mbabane Empire, but with no proof, these are but allegations. The animosity and bad taste this has left in the Department has meant that DC Tandi (affectionately called Boss T by her team) has had to tighten the reins and shape up the MSCU ship.

A sharp shrill sound interrupts her out of her reverie. “Dammit, this loud phone,” she mutters to herself. “Tandi, hello.” “Just who I am looking for. You want to solve the matter of disappearing Makotasi residents. You no doubt have many questions and I so happen to know you have not made some headway with your investigation yet. Without giving too much away, to solve this mystery, look into the disappearance of Queen Sikhalo and the Malagwane Ruins Empire. It is all connected.” a strong coarse deep female voice on the other end of the line. “Who am I speaking with?” “That’s not important for you to know. What’s important is knowing that these incidents are not isolated. Look into MaRu Empire and you will solve your mystery.” The line cuts and the anonymous speaker drops the phone.

“I’ll be damned!” Boss T thinks to herself as she stands up and looks at the chart on the far left of her office and tries to make connections. Several crime scene photos are pinned on the chart.

Five Makotasi residents had been reported missing and three found dead at Malagwane Ruins (MaRu) Castle. Two weeks ago, rumours of disappearing residents started spreading. The first sighting of a dead resident was made by an anonymous caller who called MSCU. News of the disappearance of Makotasi residents started getting more traction in the media with recurring sightings made at MaRu castle’s Davela and Sivalo wings.

Boss T recalls when Detective TenG recounted the frantic phone call she received two weeks ago.

****

Flashback – Two weeks ago – MSCU Headquarters

Detective TenG is sitting in her office and ruminating over the argument she had with her partner and lover Detective Sandz. “I am not comfortable with the way the two of you interact. Why must you be the first person Rea calls when something wrong happens in her life? I know that exes can be friends, but this seems too close to comfort for me. It just feels like lately there have been frequent calls and ‘rescue-me’ missions that you must perform for her. Surely she has other people she can lean on. Why must it be you?” an agitated TenG paces up and down the living room. She momentarily looks at a beautiful, framed photo of the two of them placed on top of the fireplace mantel that they took at a vacation in Phuket Thailand. A picturesque picture with a background of the sea and mountain ranges spanning across a vast landscape. In the photo, they are looking into each other’s eyes, holding hands, happiness abound. TenG can’t help but smile as she recalls this day. “Babe, don’t you trust that nothing will happen with Rea? It feels like you are doubting how I handle myself around her. She is my ex for a reason. I am with you now and would not jeopardise what we have. You are the love of my life baby, don’t ever doubt that.” “I don’t doubt your love for me or what we have. I just worry that she is overstepping boundaries and that if it’s not addressed, it will interfere with our

relationship." "I will address it with her my love." Sandz says as she takes TenG's hand and pulls her into a hug.

Her thoughts are interrupted when her landline rings. "TenG, hello." "Hello. There's a dead body here. Oh my word, it's so bad. There is blood everywhere," responds a very frazzled caller. "Where are you right now?" "I am at MaRu castle at Davela Wing. I was walking around the corner by the courtyard when I saw a terrible sight in front of me. A dead body that has been battered beyond recognition. Oh gosh, it's terrible," caller sniffles in the background. "Thanks for alerting us."

TenG immediately informs her partner Sandz about the call. They immediately spring into action and contact Boss T and inform her of this development.

****

Malagwane Ruins (MaRu) Castle – Crime Scene Investigation

At MaRu Castle by Davela Wing courtyard, it's a flurry of activity as MSCU crew and forensic team work on the crime scene.

"Detective TenG, we have found another body at Sivalo Wing."

TenG rushes over to Sivalo Wing to investigate. She finds junior detective Pako who is part of their team looking over the body. "Detective TenG, from what I can see, this was a quick murder. Two gunshot wounds to the head and one in the stomach."

"Shit, this looks brutal. Wait a minute, what is that tattoo on the left leg?" She takes a closer look and sees some strange branding on it.

"Do you know what this is, Pako?"

"I have no idea Ma'am."

"Take some pics, we will find out soon enough." TenG leaves and goes to find Sandz at Davela Wing.

Over the next coming days, four more murders are reported, with two of these found at the entrance of Davela Wing and the other two in Sivalo Wing. Who is behind these murders and what is their intention?

Chapter 2

Malagwane Ruins Castle from 1980 to year 2000 under the reigns of Queens Sikhalo and Katana – 20 Year Reign

The people of Malagwane are divided about their perceptions of both queens. Some are championing for them and rave about how the Malagwane community has modern state-of-the-art infrastructure, the quality of life has drastically improved from before their reign. Communities in Malagwane like Makotasi and Fairview have seen immense improvements in infrastructure and economic benefits for the people. Those who are in camp Queen Sikhalo and Queen Katana happily talk about the brilliance of these rulers and how having two women on the throne is a welcome difference as opposed to neighbouring Mbabane Empire which is ruled by ruthless leaders King Nerima and Queen Osako who are known for using brute force to intimidate and get their way.

What is fascinating is that through the years, many people have tried to cause harm to the queens, without avail. What they fail to understand is how they have such tight security and have trusted advisors and armed forces who are trained to protect them at all costs.

The naysayers who are vocally against the queens have been known to be bitter about how Malagwane Empire is ruled by women. It is unbecoming, they posit, because many empires have had men at the helm. “How dare women think they can dictate to us and tell us what to do,” one male resident of Makotasi was heard speaking bitterly while drinking with his friend at the Marola Bar in Makotasi. “Mxm, tell me about it. What nonsense is this. Next thing they will tell us to dress like women, mark my words. I’m so tired of this nonsense. If I could, I would relocate to Mbabane and have better chances under the leadership of King Nerima.” His friend responds with venom.

“Ah, you have both started with your nonsense. How many times must we hear about your hatred for our queens. Is our quality of life not better than it is in Mbabane? Don’t let them fool you, we have it better this side,” responds Joe the bartender. He is quite frankly

tired of hearing the same nonsense being spewed day after day. He has a sinking feeling in his heart that the luxuries they enjoy will be tested.

Chapter 3

Malagwane Ruins (MaRu) Castle – Crime Scene Investigation

At MaRu Castle by Davela Wing courtyard, it's a flurry of activity as MSCU crew and forensic team work on the crime scene.

"Detective TenG, we have found another body at Sivalo Wing."

TenG rushes over to Sivalo Wing to investigate. She finds junior detective Pako who is part of their team looking over the body. "Detective TenG, from what I can see, this was a quick murder. Two gunshot wounds to the head and one in the stomach."

"Shit, this looks brutal. Wait a minute, what is that tattoo on the left leg?" She takes a closer look and sees some strange branding on it.

"Do you know what this is, Pako?"

"I have no idea Ma'am."

"Take some pics, we will find out soon enough." TenG leaves and goes to find Sandz at Davela Wing.

Over the next coming days, four more murders are reported, with two of these found at the entrance of Davela Wing and the other two in Sivalo Wing. Who is behind these murders and what is their intention?

****

MSCU Headquarters – Boss T's Office

Boss T's office resembles a New York lawyer's office. Spectacular view of Makotasi City in Malagwane. A solid wood L-shaped mahogany desk, some artwork on walls. On the wall to the left of Boss T's chair is a projector with many different crime scene photos. She looks at TenG who starts talking.

"What we know so far is that both bodies were found in the Davela Wing of Maru Castle. They seem to have the same MO – both victims were shot execution style on the head twice."

"In the two days since the discovery, we've interviewed Makotasi residents. What struck me is that they all seem to think this has more to do with the looting of gold, silver and other minerals." Sandz chimes in.

"Oh ya. A Mrs Dlamini even mentioned how her uncle heard from a friend of his that when Nerima and his team destroyed Maru Empire, they stole all sorts of treasures from Maru Castle," TenG recalls.

Soon after TenG stops speaking, they are interrupted by a knock on the door.

"Come in." Boss T says softly.

Ramisto enters the office. Ramisto is a happy go-lucky 30-year-old 'techie' who prides himself with finding anything that needs to be found. He is a lanky tall guy with a trimmed moustache which he touches constantly, especially when he is deep in thought or when agitated. He loves formal wear and is always donning a suit and tie. He says it gives him a serious 'don't-fuck-with-me' look.

"Sorry to interrupt. Sandz, the photos you gave me to examine, I have some news. The strange branding mark on both of the victims' left legs is a logo of an ouroboros insignia with an arrow in the middle and a smaller inner circle where the arrow has pierced."

"Wait a minute! This rings a bell to me." Boss T exclaims excitedly, turns to her laptop and googles something frantically.

****

Boss T looks at the three of them with a smug look. "I knew this reminded me of something. I just couldn't wrap my head around this. This reminds me of the emblem that was worn by the Rasola army."

“No way, boss!” Sandz chimes in excitedly. “That’s the army that was started by Queen Sikhalo and Queen Katana in the 80s.”

“Exactly! What is someone trying to tell us by branding the victims with the queens’ army? There is so much to unpack here. Now we need to find the connection between the rumours of residents dying because of their supposed search for gold and the Maru Empire.”

She pauses for effect, looks at Sandz, TenG and Ramisto with an air of resolve and an untold excitement that Pandora's box was about to be opened. “I think we need to interview Mrs Dlamini again. Sandz and TenG, interview her and see if we get any leads.”

Chapter 4

Makotasi Suburb – Mrs. Dlamini’s House

TenG and Sandz stand outside Mrs Dlamini’s house in Makotasi suburb. TenG presses the doorbell and waits for the occupants to open the door.

Mrs Dlamini is a slim woman in her 40s. She regards TenG and Sandz with a look of worry on her face but masks it quickly.

“Mrs Dlamini, I’m detective Sandz and this is detective TenG.”

“Yes, I remember you. Come in. Would you like some tea, coffee?”

“No, thank you” Sandz and TenG respond simultaneously.

After taking a seat in the lounge, Sandz begins questioning Mrs. Dlamini.

“Mrs. Dlamini, you mentioned the last time that you have a brother, correct?”

“Yes, I have an older brother called Junata.”

“During the 80s when the Rasola army was formed, there was an influx of applications for soldiers to take part. Was he part of this army? What can you tell us about his role in the army?”

She fidgets and rubs the hem of her shirt. “Before I speak, I need to know that I will be protected should this come back to me.” TenG assures her that she will be, they will put arrangements in place.

“Where do I start…” She takes a deep breath and continues.

“Junata was excited when the Rasola army was formed. He always wanted to be in the army. He enlisted with them as soon as he turned 19. He worked his way up the ranks over the years until he was a general. In the late 90s, when King Nerima and Queen Osako from Mbabane Empire started inciting violence, Rasola army prepared for battle against them.”

“Junata was involved in preparing the army for battle. Under the instructions of Queens Katana and Sikhalo, a battle ensued with Mbabane Empire. Just when it seemed like Rasola army was gaining ground and defeating Mbabane army, Malagwane Empire was infiltrated and mostly destroyed. Anyone who was part of the security forces knew how tightly secure Malagwane was. Rumours started going around that someone from the army betrayed the queens and gave intel to Mbabane army. In fact, it is said that there was a spy who worked for Nerima and – -“

All of a sudden gunshots can be heard from the back of the house. “Hide quickly Mrs Dlamini while we investigate.” TenG motions for her to hide while she and Sandz run towards the back where the gunshots can be heard.

More gunshots ricochet around the house. Sandz and TenG split up to investigate where the sound comes from. Sandz sees a shadow outside by the shed. She runs to check and circles the shed. Moments later, she comes across the shooter who is hiding behind a bush next to the shed.

Sandz ambushes the shooter and hits them on the head with the barrel of her gun, quickly restrains the shooter and stands up to handcuff them. She calls out for TenG who has also apprehended another suspect and they head out to the precinct.

They take the shooters back to Malagwane Special Crimes Unit where they are questioned. TenG alerts Boss T that they have apprehended two suspects, fills her in on what happened. TenG interrogates one suspect in Interrogation Room A, while Sandz is interrogating another suspect adjacent room Interrogation Room B.

Why were you at Mrs Dlamini's house?" TenG interrogates suspect.

"What makes you think I will tell you anything?" the unidentified male suspect responds with disdain in his voice. "This is so stupid."

"Yeyi wena, I don't have time for nonsense. I will ask you again; why were you trying to stop us from getting answers?" TenG gets closer to him and bangs the table to intimidate him.

"I refuse to talk to you."

TenG pulls him by the collar of his shirt and looks him in the eye. "Is this what you want, huh, for me to use intimidation to get you to talk." TenG lets go of the collar, circles him and comes back to sit opposite him.

"You have blood on your hands. Here you are sitting so smug, you piece of shit. You mean to tell me you were not involved in the recent murders at Maru Castle."

He looks at her with a look of defiance and refuses to talk.

This tactic doesn't seem to work, so she decides to call his bluff to get him to talk.

A flash of brilliant comes to TenG and she decides to use it to her advantage.

"I see it so clearly now. Here's how it went down. You were involved in the Rasola army in the 80s and 90s and were also involved in the betrayal of the Queen Sikhalo and Queen Katana regime and sold them out to King Nerima and Queen Osako. Then when the insurgence occurred in MaRu Castle, you were instrumental in Malagwane Empire demise. Tell me, what did you gain from this?"

The bluff seemed to work because he starts talking. He knew the jig was up, so he spilled the beans.

"It all started when King Nerima approached me. He said that I will get a lot of money if I infiltrate MaRu Castle and spy on them. He promised me gold and money. I joined the Rasola army and gained their trust, especially the trust of Junata, who was a prominent general. After we infiltrated MaRu Empire in 2000, chaos ensued and Nerima and Osako took over Maru and destroyed most of the castle, looted it of the gold that was hidden. Junata realised that I was the one who betrayed him and started a manhunt to find me. I had to escape."

Chapter 5

Year 2000 – King Nerima Residence – Nerima's POV

You don't understand why people can't just do what it takes to get what they want. These goody-two-shoes bastards, always toeing the line and being the purveyors of morality. Morality my foot, mxm. You have worked hard to be where you are and you will be damned if people won't recognise your power. You are not opposed to using some unorthodox morally questionable methods to get what you want. Aren't you supposed to do ALL it takes to get what you want from people?

Gahhhh, I'm surrounded by losers who just want to pussyfoot and look good to others. Of course, it's about the optics, always the optics. You get this all too well, heck, you use these to your advantage. Like the time you initiated Project Feed Mbabane. You know very well you did it not because you care, but because it makes you look good. Isn't that what people are doing? Just doing what they can to look good. They don't give a shit.

You laugh out loud and rub your hands together. All is in motion. You have all the information you need.

It's time to ACT NOW!

****

November 2000 When It All Came Crumbling Down

In the blink of an eye, it seemed like what was once a solid empire came crumbling down. November 2000 will forever go down in history as the worst year, the year that Malagwane Empire came crushing down. What happened? What of the security forces that guarded Queens Katana and Sikhalo, armed to the teeth? It seemed like overnight what was once an impenetrable empire was invaded, looted of its riches, from gold to silver and other precious commodities. What a massacre. The bodies; some charred beyond recognition, some riddled with bullets.

There's been talks around the communities of Makotasi and Fairview that what sparked the invasion was a feud between the Mbabane Empire and Malagwane Empire. It was no secret that Nerima and Osako have been looking for ways to destroy Sikhalo and Katana.

There were speculations about what could have caused the feud. Most people suspect that the feud was either caused by;

King Nerima having an affair with Osa from Malagwane Empire OR

Nerima and Osako finding dirt on one or both queens of Malagwane Empire

It had been rumoured that Nerima was straying from his marriage with Osako. They got married when they were in their 20s and have been together for 20 years. In those years, there were several accounts of Nerima having a string of affairs. The latest affair was rumoured to be with Osa, who was one of the trusted advisors of the queens of Malagwane Empire.

Those who are suspicious about this being the reason Malagwane Empire came to its demise suspect that Osa was instrumental in the downfall, with some going as far as saying she betrayed the queens by spying and giving intel to Mbabane Empire.

Others rubbished the rumours because they felt Osa wasn't critical to the advisory team. Yet others questioned that perhaps there was another reason for the demise.

It is widely known that Nerima and Osako are power-hungry zealots who will stop at nothing to get what they want. They had been trying for years to get dirt on either Sikhalo and Katana. In a cruel twist of fate, they, through their private investigators and mercenaries, found dirt on Katana's father. It is said that when information goes to the wrong hands, it can be a powerful weapon to wield to get one's own way.

Turns out that Katana's father was a dirty wheeler and dealer for whoever the highest bidder was. He committed atrocious murders and was a spy for Eswatini Bureau of Investigation (EBI) before he went rogue. He was alleged to be responsible for the atrocious murder of Sikhalo's 4 relatives (two aunts and uncles). When Katana got this info, it was enough blackmail and anguish to distance herself from the empire. She could not face the fact that her father may have been responsible for the murder of her wife's

aunts and uncles. It was too much to bear. When a gloating Nerima made it known that this will cause a huge rift with her people and her community, Katana had to make a very painful decision to leave the empire.

She escaped in the dead of night. She left a note for Sikhalo:

"I cannot even begin to tell you how heartbroken I am for doing what I am about to do. I have to leave. I cannot tell you why I have to go, for your own safety. Please run as far away as possible because they are going to come for you. Just know that I will forever love you. You have my heart.

Your Greatest Love xxx"

****

After Katana disappeared, there was a full on invasion that was spear-headed by rival Mbabane Empire with Nerima and Osako at the forefront. Insurgents and others infiltrated what was thought to be previously airtight and they left a trail of destruction in their wake. People were brutally murdered, beaten and killed – there were several inquisitions, mostly to do with the disappearance of both Katana and Sikhalo. Everyone in the MaRu Castle was questioned. Did they hear or see anything related to their disappearance? Where are they? Anyone who was thought to have some ties to the queens was questioned, tortured and killed.

What happens next? Find out more in the final chapter

Chapter 6

After what felt like a gruelling interrogation with a reticent suspect who ended up spilling the beans, albeit with some concessions made about possible protection for their safety, TenG stands up from the interrogation room and goes to Sandz in the next room.

TenG knocks on the door and Sandz stands up and opens the door for her to come in.

"Sandz, a word?"

"Sure, let's step out for a moment."

They get into the passageway and both seem to have a lot to say. Sandz speaks first.

“Phew, what a wild ride. What has your suspect said?”

“He told me that the murders are connected to Nerima’s regime and how he was a spy for the Rasola army.”

“I too got the same from my suspect. She says that they worked together to give information to Nerima who launched an investigation to find dirt on one or both of the queens.”

“We need to find Junata who can give us more information so we can tie this mystery and lay it to bed once and for all.”

“Let’s do this! We’re so close.”

The End of Part 1

******

FINAL STORY: Twine and Ren’Py Versions Abridged to Suit Mediums

Malagwane Special Crimes Unit (MSCU) Headquarters, Boss Tandi’s office - Earlier in the day

“Dammit, this bloody coffee machine! When does it ever work when you need it to?” Boss T leaves the machine, exasperated, goes into her office and shuts the door.

She is cranky and hasn't had proper sleep in two days.

Tandi, called Boss T by her team, picks up the phone from her office and dials Detective TenG.

****

"TenG, good morning. Bring Sandz with you to the office."

"Will do Boss T." TenG jokes and salutes. Moments later, TenG and Sandz are sitting in Boss T's office, facing her.

"We have a rather pressing matter to attend to. It's been two days since we discovered the two bodies of the victims at MaRu Castle. We need to accelerate this and get to the bottom of these murders. What do we know so far?"

****

Boss T's office resembles a New York lawyer's office. Spectacular view of Makotasi City in Malagwane. A solid wood L-shaped mahogany desk, some artwork on walls. On the wall to the left of Boss T's chair is a projector with many different crime scene photos. She looks at TenG who starts talking.

"What we know so far is that both bodies were found in the Davela Wing of Maru Castle. They seem to have the same MO - both victims were shot execution style on the head twice."

"In the two days since the discovery, we've interviewed Makotasi residents. What struck me is that they all seem to think this has more to do with the looting of gold, silver and other minerals." Sandz chimes in.

"Oh ya. A Mrs Dlamini even mentioned how her uncle heard from a friend of his that when Nerima and his team destroyed Maru Empire, they stole all sorts of treasures from Maru Castle." TenG recalls

Soon after TenG stops speaking, they are interrupted by a knock on the door.

****

"Come in." Boss T says softly.

Ramisto enters the office. Ramisto is a happy go-lucky 30-year-old ‘techie’ who prides himself with finding anything that needs to be found.He is a lanky tall guy with a trimmed moustache which he touches constantly, especially when he is deep in thought or when agitated. He loves formal wear and is always donning a suit and tie. He says it gives him a serious ‘don’t-fuck-with-me’ look.

"Sorry to interrupt. Sandz, the photos you gave me to examine, I have some news. The strange branding mark on both of the victims' left legs is a logo of an ouroboros insignia with an arrow in the middle and a smaller inner circle where the arrow has pierced."

"Wait a minute! This rings a bell to me." Boss T exclaims excitedly, turns to her laptop and googles something frantically.

****

Boss T looks at the three of them with a smug look. "I knew this reminded me of something. I just couldn't wrap my head around this. This reminds me of the emblem that was worn by the Rasola army."

"No way, boss!" Sandz chimes in enthusiastically. "That's the army that was started by Queen Sikhalo and Queen Katana in the 80s."

Boss T responds with equal fervour. "Exactly! What is someone trying to tell us by branding the victims with the queens' army? There is so much to unpack here. Now we need to find the connection between the rumours of residents dying because of their supposed search for gold and the Maru Empire."
She pauses for effect, looks at Sandz, TenG and Ramisto with an air of resolve and an untold excitement that Pandora's box was about to be opened. "I think we need to interview Mrs Dlamini again. Sandz and TenG, interview her and see if we get any leads."
****

TenG and Sandz stand outside Mrs Dlamini's house in Makotasi suburb.

TenG presses the doorbell and waits for the occupants to open the door.

Mrs Dlamini is a slim woman in her 40s. She regards TenG and Sandz with a look of worry on her face but masks it quickly.

"Mrs Dlamini, I'm detective Sandz and this is detective TenG."

"Yes, I remember you. Come in. Would you like some tea, coffee?"

"No, thank you" Sandz and TenG respond simultaneously.

After taking a seat in the lounge, Sandz begins questioning Mrs Dlamini.

****

"Mrs Dlamini, you mentioned the last time that you have a brother, correct?"

"Yes, I have an older brother called Junata."

"During the 80s when the Rasola army was formed, there was an influx of applications for soldiers to take part. Was he part of this army? What can you tell us about his role in the army?"

She fidgets and rubs the hem of her shirt. "Before I speak, I need to know that I will be protected should this come back to me." TenG assures her that she will be, they will put arrangements in place.

"Where do I start..." She takes a deep breath and continues.

"Junata was excited when the Rasola army was formed. He always wanted to be in the army. He enlisted with them as soon as he turned 19. He worked his way up the ranks over the years until he was a general. In the late 90s, when King Nerima and Queen Osako from Mbabane Empire started inciting violence, Rasola army prepared for battle against them."

****

"Junata was involved in preparing the army for battle. Under the instructions of Queens Katana and Sikhalo, a battle ensued with Mbabane Empire. Just when it seemed like Rasola army was gaining ground and defeating Mbabane army, Malagwane Empire was infiltrated and mostly destroyed. Anyone who was part of the security forces knew how tightly secure Malagwane was. Rumours started going around that someone from the army betrayed the queens and gave intel to Mbabane army. In fact, it is said that there was a spy who worked for Nerima and - -"

All of a sudden gunshots can be heard from the back of the house.

****

"Hide quickly Mrs Dlamini while we investigate." TenG motions for her to hide while she and Sandz run towards the back where the gunshots can be heard.

More gunshots ricochet around the house. Sandz and TenG split up to investigate where the sound comes from. Sandz sees a shadow outside by the shed. She runs to check and circles the shed. Moments later, she comes across the shooter who is hiding behind a bush next to the shed.

Sandz ambushes the shooter and hits them on the head with the barrel of her gun, quickly restrains the shooter and stands up to handcuff them.

Sandz hears TenG talking to someone and goes to her, suspect in tow.

****

Both Sandz and TenG have apprehended a suspect each. They take the shooters back to Malagwane Special Crimes Unit where they are questioned. TenG alerts Boss T that they have apprehended two suspects, fills her in on what happened. TenG interrogates one suspect in a separate interrogation room, while Sandz is interrogating another suspect in a different room.

Why were you at Mrs Dlamini's house?" TenG interrogates suspect.

"What makes you think I will tell you anything?" the unidentified male suspect responds with disdain in his voice. "This is so stupid."

"Yeyi wena, I don't have time for nonsense. I will ask you again; why were you trying to stop us from getting answers?" TenG gets closer to him and bangs the table to intimidate him.

"I refuse to talk to you."

[[Use Intimidation to get suspect to talk]] – Choice A

[[Call his bluff to get him to talk]] – Choice B

****

Choice A

TenG pulls him by the collar of his shirt and looks him in the eye. "Is this what you want, huh, for me to use intimidation to get you to talk." TenG lets go of the collar, circles him and comes back to sit opposite him.

"You have blood on your hands. Here you are sitting so smug, you piece of shit. You mean to tell me you were not involved in the recent murders at Maru Castle."

He looks at her with a look of defiance and refuses to talk. This tactic doesn't seem to work, so she decides to call his bluff.

****

Choice B

A flash of brilliant comes to TenG and she decides to use it to her advantage.

"I see it so clearly now. Here's how it went down. You were involved in the Rasola army in the 80s and 90s and were also involved in the betrayal of the Queen Sikhalo and Queen Katana regime and sold them out to King Nerima and Queen Osako. Then when the insurgence occurred in MaRu Castle, you were instrumental in Malagwane Empire demise. Tell me, what did you gain from this?"

The bluff seemed to work because he starts talking. He knew the jig was up, so he spilled the beans.

"It all started when Nerima approached me. He said that I will get a lot of money if I infiltrate MaRu Castle and spy on them. He promised me gold and money. I joined the Rasola army and gained their trust, especially the trust of Junata, who was a prominent general. After we infiltrated MaRu Empire in 2000, chaos ensued and Nerima and Osako took over Maru and destroyed most of the castle, looted it of the gold that was hidden. Junata realised that I was the one who betrayed him and started a manhunt to find me. I had to escape."

****

Year 2000 - King Nerima Residence

You don't understand why people can't just do what it takes to get what they want. These goody-two-shoes bastards, always toeing the line and being the purveyors of morality. Morality my foot, mxm. You have worked hard to be where you are and you will be damned if people won't recognise your power. You are not opposed to using some unorthodox morally questionable methods to get what you want. Aren't you supposed to do ALL it takes to get what you want from people?

Gahhhh, I'm surrounded by losers who just want to pussyfoot and look good to others. Of course, it's about the optics, always the optics. You get this all too well, heck, you use these to your advantage. Like the time you initiated Project Feed Mbabane. You know very well you did it not because you care, but because it makes you look good. Isn't that what people are doing? Just doing what they can to look good. They don't give a shit.

You laugh out loud and rub your hands together. All is in motion. You have all the information you need.

It's time to ACT NOW!

****

November 2000 When It All Came Crumbling Down

In the blink of an eye, it seemed like what was once a solid empire came crumbling down. November 2000 will forever go down in history as the worst year, the year that Malagwane Empire came crushing down. What happened? What of the security forces that guarded Queens Katana and Sikhalo, armed to the teeth? It seemed like overnight what was once an impenetrable empire was invaded, looted of its riches, from gold to silver and other precious commodities. What a massacre. The bodies; some charred beyond recognition, some riddled with bullets.

There's been talks around the communities of Makotasi and Fairview that what sparked the invasion was a feud between the Mbabane Empire and Malagwane Empire. It was no secret that Nerima and Osako have been looking for ways to destroy Sikhalo and Katana.

There were speculations about what could have caused the feud. Most people suspect that the feud was either caused by;

[[King Nerima having an affair with Osa from Malagwane Empire]] – Choice A

[[Nerima and Osako finding dirt on one or both queens of Malagwane Empire]] – Choice B

****

Choice A

It had been rumoured that Nerima was straying from his marriage with Osako. They got married when they were in their 20s and have been together for 20 years. In those years, there were several accounts of Nerima having a string of affairs. The latest affair was rumoured to be with Osa, who was one of the trusted advisors of the queens of Malagwane Empire.

Those who are suspicious about this being the reason Malagwane Empire came to its demise suspect that Osa was instrumental in the downfall, with some going as far as saying she betrayed the queens by spying and giving intel to Mbabane Empire.

Others rubbished the rumours because they felt Osa wasn't critical to the advisory team. Yet others questioned that perhaps there was another reason for the demise.

****

Choice B

It is widely known that Nerima and Osako are power-hungry zealots who will stop at nothing to get what they want. They had been trying for years to get dirt on either Sikhalo or Katana. In a cruel twist of fate, they, through their private investigators and mercenaries, found dirt on Katana's father. It is said that when information goes to the wrong hands, it can be a powerful weapon to wield to get one's own way.

What did they have over Katana who had to risk everything for her queendom and escape in the dead of night to avoid being killed?

****

Turns out that Katana's father was a dirty wheeler and dealer for whoever the highest bidder was. He committed atrocious murders and was a spy for Eswatini Bureau of Investigation (EBI) before he went rogue. He was alleged to be responsible for the atrocious murder of Sikhalo's 4 relatives (two aunts and uncles). When Katana got this info, it was enough blackmail and anguish to distance herself from the empire. She could not face the fact that her father may have been responsible for the murder of her wife's aunts and uncles. It was too much to bear. When a gloating Nerima made it known that this will cause a huge rift with her people and her community, Katana had to make a very painful decision to leave the empire.

She escaped in the dead of night. She left a note for Sikhalo:

"I cannot even begin to tell you how heartbroken I am for doing what I am about to do. I have to leave. I cannot tell you why I have to go, for your own safety. Please run as far away as possible because they are going to come for you. Just know that I will forever love you. You have my heart.

Your Greatest Love xxx"

****

After Katana disappeared, there was a full on invasion that was spear-headed by rival Mbabane Empire with Nerima and Osako at the forefront. Insurgents and others infiltrated what was thought to be previously airtight and they left a trail of destruction in their wake. People were brutally murdered, beaten and killed - there were several inquisitions, mostly to do with the disappearance of both Katana and Sikhalo. Everyone in the MaRu Castle was questioned. Did they hear or see anything related to their disappearance? Where are they? Anyone who was thought to have some ties to the queens was questioned, tortured and killed.

TenG stands up and goes to find Sandz in the adjourning interrogation room.

****

TenG knocks on the door and Sandz stands up and opens the door for her to come in.

"Sandz, a word?"

"Sure, let's step out for a moment."

They get into the passageway and both seem to have a lot to say. Sandz speaks first.

"Phew, what a wild ride. What has your suspect said?"

"He told me that the murders are connected to Nerima's regime and how he was a spy for the Rasola army."

"I too got the same from my suspect. She says that they worked together to give information to Nerima who launched an investigation to find dirt on one or both of the queens."

"We need to find Junata who can give us more information so we can tie this mystery and lay it to bed once and for all."

****

"We will get to the bottom of this mystery with Maru Empire. It's starting to take shape. Let's blow the lid off this case once and for all." Sandz exclaims excitedly.

"Let's do this! We're so close."

The End of Part 1