

GIS Software Adaptations of Descriptive Place-Based Narratives:

The Urgency of Place Attachment to Disappearing Landscapes

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ABSTRACT

This paper expands upon my proposal for a digital project that applies hypermedia, GIS software, and wiki components to James Joyce's novel *Ulysses*. The conceptual project has the potential to be adapted to other texts and bodies of work, especially for place-based literature by authors from communities at risk due to climate change and/or urban development. Using theories of place-based education and place attachment, I argue that these digital projects could be used as means of historic and environmental preservation in the state of Florida. GIS Hypermedia digital projects would allow for collaboration between computer scientists and humanists to use primary source archives, special collections, spatial data, and works of place-based literature.

CCS CONCEPTS

• Arts and Humanities • Education • Visualization

KEYWORDS

Hypertext, GIS, Hypermedia, *Ulysses*, Florida literature, located-based narratives, place attachment, climate change, urban development, historic preservation

ACM Reference format:

Emiy Norton. 2023. GIS Software Adaptations of Descriptive Place-Based Narratives: The Urgency of Place Attachment to Disappearing Landscapes. In *Proceedings of ACM Hypertext conference (Hypertext'23)*. ACM, Rome, Italy.

1 Introduction

In my short paper presentation for this 2023 ACM Hypertext Conference, "Beyond Hypertexting the Hypertext: Annotated and GIS Adaptations of Joyce's *Ulysses* as Case Studies for User Experience and Engagement with Digital Projects," [1] I argue for the creation of a digital adaptation of James Joyce's *Ulysses* that utilizes hypermedia, GIS Software, and, possibly, wiki components. My proposed uses for this digital project are both scholarly and pedagogically based. An adaptation of this scope

would allow researchers to evaluate the multiple versions of the text and collaborate on layered annotations relevant to their research and discipline. More significantly, this digital *Ulysses* would serve as an accessible version of the novel that provides immediate contextualization of the narrative's allusions and allow users to immerse themselves in a hypermediate map of Dublin as they read the novel. With the possibility of a wiki component, students could collaborate with their peers and instructor to annotate the novel with their own hypermedia and hypertext to further their comprehension and scholarship. This digital *Ulysses* project builds upon many previous digital adaptations of the novel that have been attempted and completed, including *The Joyce Project*, Michael Groden's *Digital Ulysses*, *Mapping Dedalus* StoryMap, and *Extended Reality Ulysses*, among others.

While my research focuses exclusively on Joyce's *Ulysses*, I believe that this proposed digital project could be adapted for other texts that feature the migration of characters, historical or culturally-specific language, and frequent allusions to historical and cultural events no longer well-known in the current zeitgeist. The format could also work well for translated texts or texts that have undergone multiple versions, whether by the author or editing bodies. Most significantly, I believe that hypermedia GIS software adaptations of place-based literature can contribute to integral place attachment by readers, creating vital connections between scholar-activists and the at-risk locations depicted in the texts. For the purposes of this paper, a place-based narrative is defined as a narrative that is set in an identifiable geographic location, such as a city or environmental region [2]. Place attachments are defined as crucial emotional bonds that can occur between readers and a place-based text, and they can be strengthened through the use of GIS software by allowing readers from all over the world to immerse themselves in the location of a narrative [3]. Readers of *Ulysses* are a great example of place attachment in action, as many readers develop a strong connection to the city of Dublin through their interaction with the novel, some going so far as to travel to the city for the annual Bloomsday festival to retrace Leopold Bloom's narrative journey. In order to expand my

research beyond *Ulysses* and Dublin, I want to discuss the concept of place attachment with place-based texts to a location that is at risk due to climate change and rapid development: my home state of Florida.

2 Florida Literary Locations At Risk and Racial Imbalances at Play

Applying theories of place attachment to the creation of GIS software adaptations of place-based narratives is especially important when the narratives depict locations at risk due to climate change or rapid urban development. While most of the locations depicted in Joyce's *Ulysses* are still available for readers to visit in-person and virtually, many real-life locations and landscapes within Florida's literary works have been destroyed due to lack of preservation and/or climate induced disasters. Zora Neale Hurston's 1937 novel *Their Eyes Were Watching God* primarily takes place in the town of Eatonville, Florida, which is also Hurston's hometown. Eatonville, located approximately six miles north of Orlando, is one of the first self-governing African American municipalities in the United States [4]. It was incorporated in the post-Reconstruction era in 1887 and for decades served as an oasis for black Americans during the Jim Crow era and segregation. There are many Eatonville landmarks mentioned in Hurston's novel and other literary and scholarly works, including the town's first general store and post office. Unfortunately, due to the systematic disenfranchisement of black communities in Florida, Eatonville has been unable to preserve the original locations from Hurston's writings, and the town is at risk of losing what has been preserved due to urban sprawl from the greater Orlando region [5].

Similarly, Marjorie Kinnan Rawlings is another Florida author whose works depict locations at risk due to climate change and development. The Cross Creek region of Florida, located outside of the city of Gainesville, is struggling to maintain its rural status and preserve its natural environment [6]. Rawlings' texts depict a Florida climate and environment that is under threat, namely the distinctive oak hammocks, waterways, and the critically endangered Florida panther [7]. Notably, one central location of Rawlings' texts has been preserved: her home and farm in Cross Creek, which features prominently in her memoir *Cross Creek* [8]. The preservation of Rawlings' home and the slow destruction of Hurston's exemplifies the imbalance of historical preservation across racial lines. Many white American authors' homes have been maintained as important literary and historical landmarks, becoming museums that attract readers who can immerse themselves in the author's world and works to develop deeper attachment to the locations and texts. Meanwhile, there are very few historical landmarks and museums dedicated to African American authors, resulting in a disconnection between readers and the texts. While GIS software cannot fully

replicate the experience of an in-person visit to a literary location, it can provide a means of preserving what is lost or what is at risk of being lost. Using primary source materials from historic archives and special collections, hypermedia GIS adaptations can attempt to provide the necessary place attachment to readers to create deeper relationships between scholars and texts [3]. Beyond the development of digital adaptations of place-based texts using GIS software and hypermedia, these programs could be used to create digital monuments to African American authors, their lives, and, more importantly, their communities.

3 Place Attachment and GIS Hypermedia Digital Narratives

Joyce once declared that if the city of Dublin were to be destroyed, that *Ulysses* could be used to reconstruct it brick by brick. Eatonville could similarly be reconstructed using the body of Hurston's works, as she methodically described the town in her anthropological writings and literary narratives [9]. While Dublin is under no immediate threat, Eatonville, in contrast, could be destroyed within years, either due to a category-5 hurricane or the rapidly rising tide of Orlando's urban sprawl and insatiable development projects [10]. The town has already been bisected by a large interstate, I-4, and its main street was only saved from being made into a six-lane highway due to the diligent efforts of its citizens. But a majority African American town of less than 3,000 inhabitants will surely not be able to withstand the never-ending onslaught of major hurricanes and historic erasure, as Orlando's housing prices continue to climb. While the primary goal should be to preserve the historic and literary legacy of Eatonville and Hurston, a GIS hypermedia project of Hurston's work could be used to supplement these preservation efforts.

While place attachment may not seem like an integral aspect of reader and user engagement, it remains one of the most lasting ways that readers connect with texts- and these connections are what can inspire future scholarship [11]. GIS platforms, such as ArcGIS StoryMaps, could be used to develop adaptations of Hurston's texts using geographical data, archival materials, wiki annotations, and the primary texts themselves. Users would be able to navigate through the works, supplement their readings with historical and cultural annotations in multimedia formats, and spatially orient themselves in Hurston's writing and the town of Eatonville and surrounding Florida landscapes. Likewise, a similar project aimed towards the literary locations of Marjorie Kinnan Rawling's body of work would be part of a larger preservation effort within the field of Florida environmental and natural history. By having readers engage more with the landscapes depicted in Rawling's narratives, readers can more easily become attached to the threatened places, animals, and communities she depicts.

As climate change and urban development continue to threaten sites of literary and historical significance, GIS hypermedia platforms can be used to map and archive important texts depicting at risk communities. The natural landscapes within Florida, and elsewhere, are rapidly changing as the planet heats and larger climate disasters manifest. Literary works may soon be the only record of these landscapes and communities, and they should be used as justification for historic preservation within the digital world and beyond.

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