



# Epistemic Rhetoric in Virtual Reality Interactive Factual Narratives

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The turn to Interactive Digital Narratives to understand complexity offers a new model for creating, developing, and maintaining knowledge. At the same time, storytellers have turned their attention to Virtual Reality (VR). The confluence of these trends draws attention to how non-fiction practitioners can use the technical and aesthetic affordances of VR to create knowledge about complex subjects through the IDN form. This article explores the epistemic rhetorical nature of using narrative discourse in VR to create knowledge about a non-fiction subject. The IDN community has not addressed this rhetorical aspect in their proposed epistemological process. Clarifying the epistemic rhetorical aspect inherent in producing knowledge on complex subjects through IDN provides insights into practitioners' persuasive and political design and development choices. These intentional choices, in turn, impact the kind of knowledge produced. This rhetorical approach to knowledge production can be grounded in a Neo-sophist epistemic tradition wherein aesthetic choices are used rhetorically. I will present and discuss the Sophist rhetorical tactics of antithesis, the rhetoric of the possible; enargeia, the rhetoric of vivid details; kairos, the rhetoric of opportune timing; and mêtis, the rhetoric of the body. Their implementation by practitioners, how these aesthetic choices rhetorically create knowledge in the System-Process-Product model is presented. The article clarifies these rhetorical processes and choices and analyzes the 2021 Tribeca Film Festival's Best Immersive Narrative, *The Changing Same: An American Pilgrimage: Episode 1*. This VR factual IDN allows interactors to experience historical moments of racial injustice in the United States. The production team was interviewed about how they used the technical and aesthetic qualities of VR and IDN rhetorically to produce knowledge about the complex and violent history of racial injustice in the United States. Their responses indicate their active use of epistemic rhetorical tactics that capitalize on the technical and aesthetic affordances of VR and IDN to create knowledge.

## OPEN ACCESS

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### Specialty section:

This article was submitted to  
Virtual Reality and Human Behaviour,  
a section of the journal  
Frontiers in Virtual Reality

Received: 29 December 2021

Accepted: 19 April 2022

Published: 17 May 2022

### Citation:

Fisher JA (2022) Epistemic Rhetoric in  
Virtual Reality Interactive  
Factual Narratives.  
Front. Virtual Real. 3:845489.  
doi: 10.3389/frvir.2022.845489

**Keywords:** virtual reality, non-fiction, rhetoric, complexity, interactive digital narrative

## INTRODUCTION

The turn toward using Interactive Digital Narrative (IDN) to explore complex subjects has co-occurred as storytellers and audiences have returned their attention to Virtual Reality (VR). The confluence of these trends draws attention to how non-fiction practitioners can use the technical and aesthetic affordances of VR to create knowledge about complex subjects through factual narratives and other non-fiction (Nash, 2018; Rose, 2018; Bevan et al., 2019; Fisher, 2019; Bohrod, 2021). Of particular focus in this paper is the idea that through an embodied, immersive, and interactive

discourse within a factual IDN, that presented knowledge about a subject may be accepted and incorporated into the life of an interactor. A factual IDN integrates non-fiction elements with the affordances of IDN to make meaning. In short, factual IDNs are effective for teaching interactors about complex subjects. Existing explanations of the epistemic process in IDN account for aesthetic, compositional, or systems choices (Koenitz et al., 2020, 2021; Knoller et al., 2021). However, when the IDN form is used to create knowledge about a complex subject, a non-fiction subject, these are not just aesthetic choices enacted by a designer. Instead, design and development choices implemented by a creator of a factual IDN engage in a rhetorical epistemic discourse through narrative.

Recognizing the rhetorical nature of aesthetic design and development decisions made in the composition of a factual IDN informs the persuasive nature of storytelling and its influence on the active creation of belief. The end goal of knowledge production is the successful integration of the knowledge presented through the narrative by the interactor. In short, that the factual IDN successfully achieves Janet Murray's transformation (Murray, 2017) over time. In her chapter on transformation, she reminds us, "Scheherazade and Jesus both knew, storytelling could be a powerful agent of personal transformation" (Murray, 2017). Accepting that factual IDNs can and do create new forms of knowledge that interactors may enact in their daily lives means that scholars, designers, and developers of IDN must consider the form's rhetorical tactics used to that effect (Bernstein and Hooper, 2018). This rhetorical process is critical when considering the impact of emerging media's aesthetic and technical affordances on the epistemological process. Further, since many VR and IDN works make political claims regarding this form of transformation, their impact needs to be carefully and critically evaluated. Since these kinds of factual IDN works can be understood as persuasive media, a rhetorical lens is constructive.

I claim that the use of factual IDN to develop knowledge about complex subjects is a Neo-sophist endeavor. Scholars' re-examination of the old Sophists has elevated and integrated classical rhetorical insights into contemporary and critical rhetorical traditions of postmodernity (Schiappa, 1990; Jarratt, 1991; Poulakos, 2010a; Crick, 2010). The old Sophists believed in epistemic rhetoric. Epistemic rhetoric is a Neo-sophist proposal that the human mind interacts dialectically with reality and other humans through social and linguistic interactions that create knowledge (McComiskey, 1994). The Neo-sophist perspective extends the 'cognitive turn' discussed by David Herman and cited in the first Interactive Narrative Design for Complexity Representations (INDCOR) paper, "a perspective that understands narrative not as a property of certain types of artefacts, but as a cognitive function, a 'frame for constructing, communicating, and reconstructing mentally projected worlds'" (Koenitz et al., 2020). This narrative process of creating knowledge is not immediate. The integration of knowledge through narrative by an interactor occurs over time through repeated interactions between the interactor and the elements of the story (Mateas, 2001). As rhetorician Walter Fisher has noted,

the interactor in many ways chooses to actively believe the knowledge in these factual narratives because it can help the interactor live a better life (Fisher, 2021). A Neo-sophist extension recognizes that narrative worlds are rhetorical when used as an explanatory discourse. Critically, Neo-sophist analysis gives us the tools to explore the rhetorical nature of knowledge claims made through the composition of a factual IDN discourse on a complex subject.

The old Sophists practiced a participatory epistemological discourse with their audiences and peers to uncover new perspectives, expand what could be understood, and then come to a consensus. According to Neo-sophist Sharon Crowley and others, the Sophists used narrative as part of a rhetoric of possibility, which encouraged audiences to appreciate many viewpoints and perspectives in the development of knowledge (Lunde, 2004; Crick, 2010). This form of narrative and storytelling figured prominently for the old Sophists (Crowley, 1989; Crick, 2010). To ground factual IDN work in a Neo-sophist tradition (Schiappa, 1990), I will discuss the old Sophist rhetorical tactics of *antithesis*, *enargeia*, *kairos*, and *mêtis*. Antithesis uses oppositional or unique viewpoints to present what is possible. Enargeia is the vivid and lively description of spaces, characters, objects, and things. Kairos is choosing the right time to speak; *mêtis*, is an embodied approach to enacting knowledge.

There are two goals of this essay. The first goal is to situate the use of factual IDN to create knowledge within the epistemic rhetorical discourse of the Neo-sophists by examining their rhetorical tactics. Achieving this goal means aligning and situating their rhetorical tactics within the proposed System-Process-Product Model (SPP Model) for IDN (Koenitz, 2010; Koenitz et al., 2016, 2020). The SPP Model is a framework for IDN that is used by the INDCOR research action (Koenitz et al., 2020). The second goal will be to demonstrate this Neo-sophistic approach through a thematic analysis of a VR factual IDN. This approach aligns with the observation made by Rebecca Rouse and Evan Barba that in an emerging media space, designers and developers should be interviewed regarding their design decisions (Rouse and Barba, 2017).

To that end, I experienced *The Changing Same: An American Pilgrimage: Episode 1* (Yasmin et al., 2021), and then interviewed each of the producers. *The Changing Same* is a VR factual IDN that won the "Best Immersive Narrative" award at the Tribeca Film Festival in 2021. The producers of *The Changing Same* were interviewed about their rhetorical use of aesthetic and technical affordances to educate their audience on the complex history of racial injustice in the United States.

## A Neo-Sophist Perspective for Addressing Complexity in Interactive Digital Narrative

As I read the texts looking at using IDN to address complexity, even traditional narrative to address complexity, I read the echoes of old Sophists. While some disciplines search for a platonic truth, some fundamental essence in the noise of knowledge, it is a process that seems at odds with our contemporary postmodern condition (Koenitz et al., 2021). If there are no unifying grand narratives that can represent a complex reality as expressed by

Koenitz (Koenitz, 2019), a constructive way forward is to look at and appreciate the networks connecting the variegated discourses and realities of individuated cultures, societies, nations, and peoples. As Koenitz and colleagues reported at the most recent Conference on Interactive Digital Storytelling:

Certainly, truth and objective reporting remain important values, but when there are no longer a limited number of ideologically delimited ‘truths’, but instead a complex space of possible solutions, then we need new ways to report, inform, and educate with the ultimate aim to establish and support systemic thinking as a standard way to approach issues as Rejeski et al. remind us in a research report for the Wilson center (Koenitz et al., 2021).

Koenitz and colleagues’ desire to express multivariate truths that square with the postmodern condition echoes the desire for a Neo-sophist rhetoric discussed by John Poulakos.

Our efforts to make sense out of our postmodern condition needs a postPlatonic and a postAristotelian rhetoric, the kind that enables us to say that there is more to our understanding of ourselves than eternal Truth and the fixed categories of Logic. During the last 7 years, I have argued that the Sophists can be said to have hinted at the rhetoric we need (Poulakos, 1990).

The rhetoric that Poulakos and other Neo-sophists hinted at approaches knowledge production through an interdisciplinary discourse. Neo-sophist Nathan Crick, who cites Eric Havelock, notes that the old Sophists encompassed the “Promethean spirit of their age in which [m]an the tool user (as in architecture, navigation and metallurgy) is conjoined with man the abstract scientist (in numerals, alphabet and medicine) to produce a single perspective upon character and the functions of homo sapiens.” Crick understands the old Sophists as experimentalists that believed humans could “control their fortunes through the productive arts” (Crick, 2010).

Scholars approaching complexity through IDN are engaged in a similar Promethean spirit—using the affordances of interactivity, computation, narratology, ludology, and many more fields in their composition of an epistemological discourse. This experimental spirit is most evident in the emergent field of factual IDN through VR, where research on design and production work on constructing affective and compelling experiences that effectively argue for representations of reality are continuously underway (Bevan et al., 2019). Just as the old Sophists created knowledge as epistemological processes shifted from orality to literacy<sup>1</sup> (Ong, 1982; Poulakos, 2010a; Jorash, 2020), practitioners of

factual IDN and VR are engaged in a similar moment of transition in discourse (Bevan et al., 2019; Holmes, 2019).

The old Sophists did not refer to their epistemic discourse as rhetoric (Schiappa, 1991). Plato named their practice rhetoric (Poulakos, 2010b; Crick, 2010). The old Sophists were more interested in how their discourse might create knowledge or shed new light on existing situations. Further, the Sophist discourse was one of the productive and poetic arts. Classicist Michael Gagarin states, “[I]n most cases persuasion is [. . .] less important than several other objectives, such as the serious exploration of issues and forms of argument, the display of ingenuity in thought, argument and style of expression” (Crick, 2010). This epistemological effort was, “rooted firmly in an awareness of the ultimate inaccessibility and unfathomability of Reality, and of the role of language in the construction and perception of the unstable ‘realities’ and ‘truths’ in terms of which we must live our lives.” (Johnstone, 2006) The old Sophists were then engaged in an epistemological discourse that was a pragmatic response to the contemporary moment.

A Neo-sophist perspective on addressing complexity in IDN means appreciating that the old Sophists would have considered IDN a style of discourse. As Crick notes, “Sophistical style was thus a result of the unique fusion of mythos and logos, of oral narrative and logical argument, within a discursive symbolic form” (Crick, 2010). The old Sophists used narratives to ground their logical analysis. This was the utility of mythos in sophistic rhetoric, and an apt example comes from Plato’s *Protagoras*:

In the home of Callias, Socrates and Protagoras are debating. Socrates asks Protagoras why any individual might be qualified to advise on matters of virtue. Protagoras relates a modified version of the Prometheus myth. The traditional telling, in summary, is that Prometheus betrayed the gods and stole the fire of Olympus for humanity. Through this flame, he gave humanity knowledge and technology. Zeus punishes Prometheus by tying him to a rock and daily sending an eagle to eat out his liver. When Protagoras tells the story, he omits the stealing of the fire and Zeus’ violent punishment. He focuses instead on Zeus’ deliberation over justice and the gift of conscience that the flame provides. In answer to Socrates, Protagoras uses the retelling to demonstrate that virtue has been equally distributed through humanity by the example of Zeus’ jurisprudence. Accordingly, all humans may advise on virtue.

## NEO-SOPHIST ANALYSIS OF THE CHANGING SAME: EPISODE 1: THE DILEMMA

I have proposed that the Neo-sophist perspective on using IDN discourse to create knowledge about complex subjects is constructive. This perspective turns a critical lens to the rhetorical tactics of epistemic narratology. To clarify these epistemic rhetorical processes, the article explores *The Changing Same: An American Pilgrimage: Episode 1*. This VR factual IDN allows interactors to experience moments of racial injustice in the United States. In this initial episode, the producers

<sup>1</sup>It should be noted that the transition from orality to praxis was not immediate, nor did it evolve evenly across domains of knowledge. While the praxis was developed for mathematics and mathematical research first, similar methods for physics, chemistry and biology occurred much later.

Yasmin Elayat, Joe Brewster, and Michèle Stephenson explored the complex yet straightforward dilemma of racial inequity and oppression in the United States. Throughout three episodes, “You time travel on a non-linear journey to explore the past, present and future; it is an American pilgrimage through our history.” (Yasmin et al., 2021) The directors present an equitable world reimaged through an Afrofuturist lens in the final scene. It is a world in which they ask interactors to be “attentive and accountable to the violences of the past” (Yasmin et al., 2021) while envisioning a better future. The first episode utilizes live performers, volumetrically captured, that converse with the interactor and with one another. The experience exists in both 3DoF and 6DoF versions<sup>2</sup>. The experience uses VR’s affordance for interrupting Euclidean space and time to create impossible architectures that spatially connect 400 years of racial violence.

The producers based the experience on the true story of the lynching of Claude Neal. In Marianna, Florida, in 1934, Claude Neal was lynched. Neal was a 23-year-old man when he was tortured and murdered. Racists used circumstantial evidence against Neal to falsely link him to the murder and rape of a 19-year-old white woman named Lola Cannady. After he died, a lynch mob of 2,000 mutilated his body. The violence and atrociousness of the act garnered national attention and vehement opposition. Michèle Stephenson and Joe Brewster, producers of Rada Studios, produced a short documentary for PBS on Marianna resident and poet Lamar Wilson (Rada Studios, 2019). Every year, Wilson runs a marathon to draw attention to the buried history of Claude Neal’s spectacle lynching. Stephenson and Brewster sought to use immersive media to explore this story further to enable interactors to understand and be embodied, not just in Marianna but also in other sites of racial violence and oppression throughout history. What they produced through a collaboration of their studio, Rada Studios, and Yasmin’s studio, Scatter, resulted in the VR factual IDN.

To better understand how the producers used aesthetic choices to create knowledge, how aesthetic choices made in the composition of a factual IDN are rhetorical efforts, the producers of *The Changing Same* were interviewed. In semi-structured interviews that each lasted 70 min, the producers answered a set of seven questions about how they believed the aesthetic and technical affordances of VR and narrative helped create knowledge about their subject. A focus on their design and development choices informs the rhetorical aspect of creative efforts. Whether or not they are rhetorically effective at creating knowledge for an audience is outside the scope of this essay. That said, future user studies could, and should, look at what an interactor learns and from which epistemic rhetorical tactics. What is in scope is the intentional compositional choices and how the epistemic rhetoric is meant to play out through the IDN for the interactor. The answers to the questions were then analyzed from

a Neo-sophist perspective to elucidate epistemic-rhetorical choices.

## Summary of the Experience

After I launched the experience, the Octavia Butler quote, “To survive, know the past. Let it touch you. Then let the past go,” fades in. I hear crickets. As the screen fades to black, the producers transport me to a scene in Marianna, Florida. I should note that I only know this from my previous research. This knowledge is not explicit. The team at Scatter Studios volumetrically captured cypress trees, the old dirt road, and a cracker house in the area. Sitting on the steps of the cracker house is my guide through the experience, Lamar Wheaton. Wheaton is a composite of the real Lamar Wilson. We stand almost eye-to-eye. Wheaton invites me to look around and encourages me to be curious. I take in the cypress trees, the green-blue night sky, the orangish red haze, and the dirt road. The house hangs behind Lamar. He invites me to explore the complex history of racial injustice in America as he gestures toward himself and the space around him. As he urges me to take a step in his shoes, to identify with his lived experience, particles of fireflies swirl around him before they wink him out of existence. My eyes follow their path. Simultaneously, the space takes on a cloth-like-physics—the world stretches and tears away—drawing my eyes to the seams and then what lays beyond: a journey through time.

Within this transitional moment, which occurs between all three scenes in the first episode, the producers move me past volumetrically captured and computer-generated artifacts of black history in America. The producers present me with representations of the Apollo Theater, the statue of Martin Luther King, and scenes from Marianna. I see, in the distance, a spatial metaphor for time, scenes that are not historical. Later, I will recognize that given the non-linearity of the experience, that these are glimpses of the Afrofuturist possible future. I can shift and move my body in the experience at this point but cannot freely explore. As the journey slows and comes to an end, the world’s pieces zip back together into a cohesive actuality.

The next scene occurs in the suburbs on a street modeled after one in Montclair, New Jersey. The only thing out of place on the street is one of the trees from Marianna: a representation of the tree the lynch mob used to lynch Neal. Within moments of being situated on the street, a police car rolls by and flashes its lights and sirens. The cops exit the vehicle and shine a bright light in my face. I instinctually flinch. The light is blinding. In the transition of this moment, the cops invade my personal space. I feel like they loom above me. The tension of the moment escalates as it becomes clear that I will be arrested, as Lamar tells me, “for walking while black.” The moment is jarring because I am not a black man. When I find myself in the back of the police car, Lamar Wheaton returns, arrested as well, and is forced into the car’s backseat along with me. In a moment where Wheaton is speaking with the cop, telling him that he is not a “speaker but a thinker and you should be grateful,” Wheaton’s gaze passes through me—it is a rhetorical gesture and a furtherance of the invitation to think. As the cops wrestle Wheaton out of the car and begin to beat him, the world again tears away, and I am moved from this oppressive confrontation through time.

<sup>2</sup>A 3DoF (3 Degrees of Freedom) experience is one in which the interactor can look around the scene using their head. They can look up and down, left and right, front and back but do so from a stationary perspective. A 6DoF (6 Degrees of Freedom) experience allows an interactor to move freely through the space.



Historical moments of black joy and life in America swim in the space around me.

When the world zips back together again, I am in the center of a row of jail cells. Many volumetrically captured actors are in the cells, including my guide, Lamar. Two cops are present, as is a public defender. The public defender approaches to let me know that both Lamar and I have been charged with assaulting a police officer. That did not happen. It is a false charge. An attempt at illustrating structural injustice occurs. The defender lets me know that I can walk with probation if I plead guilty and claim that Lamar began the assault. Both Lamar and I are innocent, but the experience illustrates our powerlessness in the justice system. Lamar understandably defends himself—claiming correctly that he did nothing wrong. I feel a sense of solidarity with him. Depending on the identity of the interactor, the identity they bring into the experience with them, they may understand the scene as one of structural injustice. Different identities may understand this moment differently.

At this moment I experience a time shift back to the late 19th century. In this parallel prison scene from the past, the police have arrested a free man for being in the wrong place at the wrong time. For, in parallel, walking while being black. The police are unwilling and unable to help. As the producers establish this parity, they shift me back to the contemporary moment. One of the larger cops approaches to ask if Lamar and I are causing trouble as Lamar defends our innocence. The world begins to strip away again.

We travel through time again, this time to the Afrofuturist future, to a clean white room. In the middle of the space is a 13-foot character named Harriet who checks to see if I am interested in continuing the epistemic discourse. If not, she suggests I “take that thing off your head.” It is an appropriate confrontation. “If you are game, though,” she encourages me to turn the music up as she dances. The hairs on the back of my neck stood on end. My heart beat faster. Here is where Episode 1 ends, with an invitation to continue learning.

## Neo-Sophistic Tactics in *The Changing Same*

In the analysis of the experience, the theories underpinning each individual rhetorical tactic will be explored. Immediately following these explanations, results from the interviews will inform how choices the producers made can be understood as the implementation of these tactics. I interviewed producers Yasmin Elayat, Michèle Stephenson, and Joe Brewster for roughly three and a half hours. They answered the following questions in their semi-structured interviews:

- 1) What are the aspects of VR as a medium that you believe impact how knowledge is created and shared?
- 2) What are the aspects of VR narratives that help create knowledge?
- 3) How do you think the 3DoF vs. 6DoF experience create knowledge in different ways?
- 4) Why have you chosen to break the 4th wall in the experience?
- 5) What are your thoughts regarding VR as a medium for reflecting on space and bodies in time?
- 6) Why use volumetric capture for actors instead of 3D models?
- 7) How do you envision the audience embodied in your experience? How does this embodiment impact knowledge production?
- 8) There are many different media and traditions that come together in your experience. How do they interact with one another to create knowledge?
- 9) How does VR narrative persuade audiences to actively create belief in the factual nature of your work?

The rhetorical tactics that will be explored are *antithesis*, *enargeia*, *kairos*, and *mêtis*. An explanation of each along with an example can be found in **Table 1**. The analysis begins with the producers discussing their intention to use narrative rhetorically to create knowledge.

## Neo-Sophist Use of Narrative for Rhetorical Goals

These utterances occurred when the producers used language or phrasing to support the belief that storytellers can use narrative rhetorically to achieve political ends or transformation in individuals or society. Such statements establish the Neo-sophist perspective that narrative discourse is epistemic. For example, from producer Joe Brewster, “What is very clear about Yasmin, Michèle, and myself is that we come to this with political intention. And our goal, as makers, is to make this a better place. Allow people to think about who we are, and why we are, and how we treat each other.” Brewster continues, “we are political, we want to make people think about the nature of the world, we want them to think about hunger, white supremacy, we want to discuss race.” Likewise, Joe and Michèle were explicit in their political desires and efforts to achieve transformation through narrative. Michèle says, “Whatever the immersive aspect of it is, I’m in storytelling, I’m doing this work not to make money but to hopefully have an effect that has a structural impact.”

All the producers discuss using VR effectively as part of their epistemic discourse. Elayat notes, “When you’re working in VR and are a director, I think you’re actually an influencer, and I think you have to think about that. You have to think about all these tools you have at your disposal, and how to influence and guide this experience.” Elayat puts forward the goal of this influence.

It is about the cyclical notion of history in America, and how much we’re still living with the legacy of our past today. [...] We picked certain time periods for certain reasons. So, we picked [...] east coast New Jersey, and a modern-day suburb where it is dangerous to be walking as a black man—walking while black. [...] jumping to a slave period where a man is a free man and unjustly captured [...] that was a moment that was [...] maybe the most obvious where we’re finally saying, ‘Hey, this is what we’re trying to say this whole time’ [...] how

**TABLE 1** | An explanation of the rhetorical tactics used in the analysis.

Rhetorical technique	Description	Example
Antithesis	The rhetoric of the possible: Positioning unique or oppositional viewpoints	When the experience begins, the avatar of Lamar Wheaton asks the interactor to step into his shoes to see his perspective on the complex history of racial injustice in the United States
Enargeia	The rhetoric of vivid details: Achieving a sense of verisimilitude	The cracker house, trees, and old dirt road in Marianna Florida have all been volumetrically captured and rendered in the virtual scene to achieve fidelity with the physical details in nature
Kairos	The rhetoric of opportune timing: Choosing the right moment to speak, performing a persuasive act, or choosing the optimal time and place at which the argument is made	The producers create a charged moment to address issues in the justice system when, in the jail house, a public defender who is representing both the interactor and Lamar pressures the interactor to make a false claim against Lamar for a reduced sentence. When Lamar defends himself vocally both him and interactor are confronted and physically intimidated by a police officer to be silent
Métis	The rhetoric of the body: Enacting embodied knowledge through presence or movement	When in New Jersey, police shine a light directly into the eyes of the interactor which encourages them to flinch instinctually at the sensory confrontation

much the past and the present are just kind of an evolution of the same.

There are also statements related to the political future of the VR storytelling space. As Stephenson states, “There is the very tangible physical and creative part [...] but there’s also the political aspect of the VR ecosystem in terms of the ownership of that space [and] what it looks like.” Such a statement aligns with the need to have a political impact and the Neo-sophist Susan Jarrat’s recognition that antithesis is essential for democratic representation. Stephenson underscores the importance of the narrative-based discourse, “We need to make sure that we don’t perpetuate the same hierarchies that have existed since *Nanook of the North* and documentary in this space. So, for us, VR is different, but it is also the same in some ways in terms of what we are challenging structurally.” For Michèle and the other producers, this challenge is political and intended to create space for future generations. As Michèle states, “Where do we find the space to sustain the stories like *The Changing Same* so younger folks coming up, who become immersed in either social media or other spaces through Meta or its equivalent, where does *The Changing Same* live? At least, I want to know that *The Changing Same* exists.”

## Antithesis and the Rhetoric of Possibility in Interactive Digital Narrative

Epistemological work through narrative highlights what Neo-sophists refer to as a rhetoric of possibility or antithesis. It is not that the old Sophists presented new discourses to be oppositional. Instead, they presented alternative discourses to present what might be possible (Poulakos, 2010a). Antithesis encouraged audiences to move beyond their existing situation, the actual, and reject the established in favor of a change. Susan Jarratt, a feminist Neo-sophist, recognizes that this same epistemic-

narrative rhetoric can undermine the “falsely naturalized logic of patriarchy.” (Jarratt, 1991; McComiskey, 1994). Jarratt’s work elevates histories that had been lost, using narrative to enliven perspectives that had been silenced. The use of antithesis, the rhetoric of possibility, encourages a kaleidoscopic understanding of a subject.

Antithesis, this rhetoric of the possible aligns with the manifold and diverse narratives emerging from a protostory at the System level of the SPP for factual IDN. Each narrative, with its myriad of diegetic units, strategies, media, and relations, is a possibility born of the protostory. As Koenitz and colleagues suggest, “This kind of narrative design can feature complexity in the form of an underlying network of rules and contrasting claims, implementing for example the initial conditions and backstories in cultural heritage” (Koenitz et al., 2021). Jarratt explains, “[A]ntithesis creates an openness to the multiplicity of causal relations [...] not a spurious trick for clouding minds of the listeners but rather works to awaken in them an awareness of the multiplicity of possible truths” (Jarratt, 1991) Through a Neo-sophistic lens, each of those potential rules and contrasting claims encompass the rhetoric of the possible. Janet Murray’s recognition that IDNs are kaleidoscopic and can “capture the world as it looks from many perspectives—complex and perhaps ultimately unknowable but still coherent” (Murray, 2018), can be read as a Neo-sophist approach that enacts the rhetoric of possibility, the possibility of different perspectives.

Recognizing that some possible perspectives may prove false, that some may be presented to manipulate, draws attention to the potentially problematic use of antithesis in the production of knowledge. Its ethical use, just like any rhetorical tactic, is guided by the morals of the rhetor employing it. That antithesis is meant to persuade an audience, or to present a different perspective, does not make it inherently immoral. However, the immediacy of VR and the immersion it provides heightens the risk that a bad actor, seeking to manipulate others with ill intent, might achieve

deceptive ends with greater success. Other technologies, such as social media when manipulated by bad actors, have proven this out. VR amplifies this challenge.

With complexity in mind, these rhetorical narratives sit at the complexity of the environment (Koenitz et al., 2020). As Nick Montfort reminds us, IDN works contain “potential narratives” (Montfort, 2005) which can be instantiated in many different ways, each presenting a different perspective. How designers shape the VR environment presents an argument about what possibilities exist in that narrative space. This composition of the possible aligns with the old Sophist Gorgias’ intention to use rhetoric and poetics as part of an aesthetic organization to influence an audience’s intellectual and emotional dispositions (Andrade and Cunha, 2020). Applied to IDN for complexity, it arranges the material possibilities for the interactor’s collective exploration and consideration.

This arrangement in VR for a factual IDN is a rhetorical truth claim (Fisher, 2019; Bohrod, 2021) and invokes the rhetoric of possibility. I have referred to these constructions as actualities in previous work, borrowing the term from documentarian John Grierson. Grierson defined documentary as the “creative treatment of actuality.” As I proposed, “these experiences and the subjects within [...] are constructed and dramatically compressed. They are, in Grierson’s language, ‘truth made beautiful’. They are an interpretation of reality and therefore suspect.” (Fisher, 2017) Appreciating my own skepticism, I would like to expand upon the statement to say that though these actualities are suspect, they are an invitation to appreciate the possible. They present potentialities, constructed arguments through the narrative as epistemic rhetoric of the possible. In his dissertation, Jacob Bushnell Bohrod takes this further, claiming that VR privileges the virtual as the conditioning element of the real (Bohrod, 2021). That, “virtualizing technologies have rhetorically constituted the shape of the real.” And, while VR and other immersive media can never truly supersede the material and physical realities of nature, they can make a greater claim upon them than previous forms of media. As Maria Engberg and her colleagues remind us when naming VR and other immersive media as Reality Media, such media “place themselves between us and our perception of the everyday world, and in this sense, they redefine reality itself” (Engberg et al., 2018). This approach to a mediated discourse shaping the real aligns with a Neo-sophist conception of an epistemological discourse’s end goals.

## Neo-Sophist Antithesis and the Rhetoric of the Possible in *The Changing Same*

Utterances were noted for antithesis and the rhetoric of the possible when the producers used language or claimed that narrative could present a possible future, an alternative scenario, from which interactors could learn. For example, from producer Michèle Stephenson, “So, how do you shift that from a political perspective—it’s by being in that space and challenging with the stories that we feel are important to be told in an immersive fashion—because of that different level of impact.” Michèle invokes the rhetoric of antithesis in conjunction

with the affordances of VR to tell stories that provide new, necessary perspectives. She continues, “Our objective was to make history relevant to the present and to the future, and to create these levels of parallel stories and experiences that were intimately interconnected because in some ways history has not changed—it’s just transformed itself.”

This elevation of buried histories, central to the Neo-sophist historiography suggested by Jarratt, is echoed by Yasmin when she discusses the origin of the story, “this is like a project that’s trying to unbury this history and have you as the audience feel like you are a witness to this very history. And that means unearthing it—it becomes something—it is no longer buried.” Yasmin continues, “I think it is a helpful thing to frame the making of the world, how it is designed—it’s based on a true story meant to respect, memorialize, and recontextualize a past event that happened, and it is going to come back—this event—but it is already in this piece, whether or not you know it.” The built world utilizes the core components of a true story to construct a possible virtual world. The rhetoric of the possible also connects to the American Afrofuturist future proposed in the experience. As Elayat states, “Because the final, final, final is a future, the future space is our imagined equitable future.” Elayat implicitly invokes the rhetoric of the possible.

At times, utterances around the rhetoric of the possible and antithesis aligned with utterances of enargeia. The producers confirmed this alignment when discussing the time travel portals. Michèle says, “the best editing on a flat-screen creates [...] meaning through juxtapositions that are multiple, at multiple levels. If you take, for example, our time travel, our time machine portal, you know we’re hitting people with different things in time that make these connections and juxtapositions in a visceral way that’s not in writing, or that is not linear in that sense.” Elayat continues.

[in] this time travel space, besides seeing historical moments there are very important buildings like the Apollo theater and photos [...] from black life and black joy and celebration, there’s symbols from the scenes that you’re going to be visiting, whether or not you know you’re going to be visiting—like the police car or the jail scene—and they’re actually all in there, and scenes that we have not been to yet but will be in the future episodes, they’re represented in the space. Also, we have people from 400 years of history [that are] supposed to be in the [time warp] moving around doing everyday things.

The invocation of juxtaposition can be framed as antithesis, the rhetoric of the possible, by presenting oppositional or unique viewpoints sequentially. Just as in linear cinematic editing, wherein different shots might inform the perception of the next (i.e. the Kuleshov effect), the historical connections give form to 400-plus years of oppression. However, unlike linear editing, and especially within the time travel scene, these moments of oppression exist simultaneously in the same space as moments of black joy and victory. This spatial composition of

the juxtaposing scenes of black joy and oppression illustrate the rhetoric of the possible. This illustration is made more explicit by glimpses of a free and hopeful Afrofuturist equitable future. The interactor is presented with both the oppressive history of racial injustice in America but also moments of happiness enjoyed by those suffering through that injustice. The rhetoric of the possible points to the latter and valorizes the hopeful, “imagined equitable future.”

## Enargeia and Sense of Presence in Interactive Digital Narratives

In previous work, I have discussed the rhetorical concept of enargeia as related to immersive media (Fisher, 2019). Since then, I have learned it is connected to the old Sophist rhetoric of the possible (Poulakos, 2010a; Fledderjohann, 2020). Furthermore, my understanding of its connection to meaning-making<sup>3</sup> has expanded in constructive ways. Enargeia is a rhetorical tactic of description, one so vivid and powerful that the listener is transported to the story’s scene<sup>4</sup>. It is connected to the rhetoric of possible because it uses highly charged, sensory details to add fidelity to those possible realities (Fledderjohann, 2020). These details encompass objects in the space, the flow of time, the composition of place, and the traits of persons (Sharpling, 2002). Enargeia is at play in the System Level of the SPP, vivifying spaces, characters, and objects in the instantiated narrative. These elevated details establish the world through a “wide range of sense impressions, and hence emotions, from the reader; a range of competing, co-existent and highly-charged lexis; and a cumulative intensity which entices the reader into a state of suspense and wonder” (Sharpling, 2002).

From an IDN or VR perspective, enargeia may be confused for immersion. However, it is more aptly aligned with the subjective Sense of Presence (SoP). An enargic scene helps an audience feel genuinely there, directing their attention to “perceiving the narrated world instead of the text” (Lindhé, 2013). Quintilian, the Roman rhetorician, notes that enargeia makes the absent (the possible) visible. Enargeia is not used as “much to narrate as to exhibit.” Through its application, “our feelings will be moved not less strongly than if we were actually present at the affairs of which we are speaking” (Fledderjohann, 2020). From a Neo-sophist perspective, the aesthetic choices used to establish an SoP in VR are enargic, used rhetorically for epistemic ends.

Enargeia’s various consequences include developed knowledge, comprehension, and imagination (Lindhé, 2013;

Fledderjohann, 2020). Enargic scenes are within an actuality (Fisher, 2017), constructions of fact and imagination meant to communicate intentional meanings. In my previous work, I have noted that this co-construction uses the affordances of immersive media, both its capacities for spatial capture and the mutability of that captured material in game engines (Fisher, 2019). The volumetric capture of real-world objects and the 360-filming of places rhetorically claim to be epistemic in two ways. First, the volumetric capture of objects, people, flora and fauna, structures, and things invokes long-held myths of scientific inscription associated with photography. As I have mentioned in previous work, “For example, the myth of scientific inscription for film argues that the optics and natural light produce an image that is authoritative enough for scientific observation” (Fisher, 2019). The resurgence of this myth for volumetric capture adds the spatial aspect to its belief structure. The second aspect deals with how interactors experience rendered volumetrically or spatially captured (360-images). To quote Nonny de la Peña, “Immersive journalism does not aim at presenting ‘the facts’ but some aspect of the experience that cohabit with ‘the facts’” (de la Peña et al., 2010). The remix of the actual (captured material) with aesthetic choices (rendering shaders and graphics manipulation) rhetorically communicates a constructed meaning that is the realization of enargeia through immersive media.

How enargeia plays out in the epistemic discourse of a VR factual IDN relies on this construction of fact and imagination; of spatially captured material and how game engines render that material for an interactor. For VR, the immediacy of these details is meant to situate the interactor within a present moment where these sensory details can work upon their cognitive and emotional capacities. Classicist scholars look at the use of enargeia in Homeric narratives and have noted that their vivid details and organization “is ordered in such a coherent and vivid fashion that we can mentally transport ourselves to the Trojan plain” (Grethlein and Huitink, 2017). Homer’s use of enargeia makes the dramatic possibilities of the moment known to the interactor (listener). When discussing the enargic and epistemic narrative of Doms Day Preppers, Fledderjohann relates, “Enargeia<sup>5</sup> structures behavior and builds identities around [...] dramatic possibilities [...] rhetorical practices are more akin to what Henning identifies as early church leaders’ practices of using Enargeia to depict hell in ways that ‘emotionally move’ their audiences toward ‘right behavior’ (31)” (Fledderjohann, 2020). This desire to transform the interactor, to move them to the “right behavior” is connected to creating moments for dramatic agency. Those moments take place in scenes charged with enargic structures. As Fledderjohann notes, “enargeia motivate what they [the interactor may] accomplish in their current kairotic moment” (Fledderjohann, 2020). The construction of the place provides the opportunity to act in pre-determined and composed ways.

<sup>3</sup>After a discussion with Koenitz, I want to note that there is semantic clarification that the field must address regarding meaning-making and sense-making. In this article, when I use the term meaning-making, I am attributing authorial intent—the developer or producer is attempting to make meaning. Sense-making occurs when the interactors attempt to perceive that meaning through their perceptual capacities.

<sup>4</sup>Our best understanding of energeia comes from Quintilian, a Roman rhetorician who came many centuries after the old Sophists. The Neo-sophist John Poulakos connects energeia to that of the rhetoric of the possible. According to Poulakos, “[b]y voicing the possible, the rhetor discloses his [sic] vision of a new world to his listeners and invites them to join him there” (Poulakos, 2010a).

<sup>5</sup>There are two spellings of energeia. They include: energeia (Fledderjohann, 2020) and enargia (Poulakos, 2010a).



## Neo-Sophist Enargeia in *The Changing Same*

Utterances were noted for enargeia when the producers invoked representational energy and fidelity of details, or the evidentiary nature of those details related to their capture, as part of the meaning-making process. Those details are part of the VR environment, scenes, characters, objects, flora and fauna, structures, and things. For example, from Joe Brewster, “I think it allowed us to capture some realism that is harder to capture than with an animator.” The producers noted this recognition of the power of volumetric capture of humans multiple times. Stephenson recognizes an innate connection between the captured details and human sense perception. She states,

There was just something about the volumetric capture using the data from real live bodies and objects—there’s a sort of an organic aspect to it [. . .] Organic, in terms of their biological makeup—some of them might be inanimate but are biological beings that are being sort of repurposed through Unity. I think that allows us to feel more emotion as we connect.

This connection to the organic and biological is also discussed by Brewster, “The trees that you see are really captured, but they don’t exist in that form. They were shaded differently, they move differently, but I think the essence of those trees comes from the photogrammetry and I just think it just adds something that is more impactful.” Indeed, the tree from which Neal was lynched is captured and integrated into the experience. The producers will clarify this connection in future episodes.

Stephenson discussed the connection between enargeia and meaning-making, “The thing is we’re sort of trying to recreate a basis of an organic real world, but it is a launchpad [. . .] it is allowing for imagination, for the magical realism, we [are] trying to do, and for making the connections,” Brewster adds, “It also provided us with an opportunity to create something that was bigger than the sum of its parts [. . .] VR allows me to color in and make the story more alive; I take the walls of the building and the juke joint, and I can make them move, and I can make the lights flash as the music comes through.” Further, Brewster discusses the use of enargeia for diegetic purposes, “we tried to think about ways to do exposition in a way, that’s more in line with VR. [. . .] We’ve seen in VR where you have TV screens that basically allow for these bridges and information—so, we wanted to avoid that” And, what resulted was the time warp that uses exhibition, “So we’re seeing and hearing things in that time travel that provide exposition for the character journey.”

Shared among the producers was the opinion that the details and textures that composed the character of Lamar Wheaton would have a particular influence. As Brewster discusses, “We spent, I don’t know, a month thinking about the skin of Lamar whether it would be translucent, whether he was a god, whether he was human, and what would that mean in terms of how we experience him and what environments emotionally would his skin appear in and what form.” Beyond the details that made up

Lamar’s body, there was also an effort made to make sure that Lamar and the rest of the characters looked directly into the eyes of the interactor to convey emotion. As Stephenson notes, “Lamar looking at you straight in the eyes [. . .] we worked very, very hard to make sure that there was the sense of eye contact.”

Elayat highlights the direct connection to history and knowledge, “And so photogrammetry, even though it is totally rooted to the origin story and Claude Neal’s memory [. . .] made so much sense here to build this world, even though people don’t know that. Not everything, obviously, is photogrammetry, but we’re trying our best to represent real-world places.” Connected to being in the space at a particular moment, this statement from Elayat connects enargeia and kairos, “You have to witness, like as a human being (like especially Americans with this history of this legacy), we have to really acknowledge history, witness history like touching the past, acknowledging it before any type of forward movement, any type of healing, any type of future building can happen, and so we felt that with VR you already have a medium where users are participants.” The statement highlights how the rhetoric of the possible, made actual through the sensory details of enargeia, puts the user in a present moment where they can act.

## Kairos and Agency in Interactive Digital Narratives

The sophisticated term of kairos, addressing the audience at the opportune moment for persuasive effect (Schiappa, 1990; Poulakos, 2010a), is constructive toward understanding the rhetorical aspects of temporal interpretation that occur as part of the double hermeneutic<sup>6</sup> of IDN experiences (Karhulahti, 2012; Roth et al., 2018a). The double hermeneutic is a method of interpretation that addresses how, in an interactive experience, the interactor interprets designed experiences even as their actions change those experiences. As Karhulahti states, “The interaction between the player and the game establishes a cycle in which interpretation leads to configuring action and its feedback” (Karhulahti, 2012). Each playthrough, shaped by the preceding playthrough, informs the proceeding experience. The double hermeneutic draws our attention to how each time an interactor returns to an IDN, their experience appears materially different. Each of these replays might be considered a moment for kairos. Kairos suggests that such a discourse exists in time, at specific moments where “what is said must be said at the right time” (Poulakos, 2010a). In the case of IDN, one way in which kairos occurs is through replays wherein the factual narrative presents a different perspective with each proceeding playthrough.

Another interpretation of kairos, “the ability to find the precise moment and conditions to perform a persuasive act” (Euteneuer, 2019), comes from games scholar Jacob Euteneuer and is

<sup>6</sup>Noam Knoller’s hermeneutic spiral (Knoller, 2019) provides an alternative formulation, focused on the interpretation of a work across multiple playthroughs, but uses a vocabulary that lacks specificity in regard to the digital context.

discussed by rhetorician Collin Gifford Brooke (Brooke, 2009). In the service of producing knowledge, it is not necessarily on replay but through each timed ludonarrative interaction that knowledge may be produced. Further, kairos points to “man’s sense of tim [ing]” (Poulakos, 2010a). Kairos belongs to the designer and developer of the factual IDN, both their composition of the narrative and their engineering of the interface. There is a dialectic between these two kairos meanings: first, the interactor finds the precise moment to act; second, the designer creates the opportunity for that moment. Together, they co-create the experience. Designing structures for kairos occurs in the protostory at the System level of the SPP but is implemented through the double hermeneutic relationship with the interactive system at the Process level (Karhulahti, 2012; Roth et al., 2018a). VR factual IDN also uses time and timing in different ways. In a recent survey of VR non-fiction that looked at 150 experiences, the design of time was used or altered in 61 experiences. Time was either one, sped up; two, reversed; three, used in real-time; four, slowed down; five, frozen; and six, used at different variables (Bevan et al., 2019). These different aesthetic tactics illustrate the rhetorical use of kairos to make meaning.

Steven Rita-Procter gives us another interpretation: kairos “refers to the specific contextual moment and place in which the argument is being made” (Rita-Procter, 2018). This approach allows us to consider that moments for dramatic agency arise from space and places in IDN experiences (Jenkins, 2004; Nitsche, 2007, 2008; Hameed and Perkis, 2018). Indeed, work from cognitive scientists Vinod Menon and Lucinda Uddin supports the idea that enhancing sensory inputs at a particular moment engages, “visceral sensory and somatic sensory processes” of the brain’s insula to create meaning (Menon and Uddin, 2010). That such kairotic moments are rhetorically effective for creating knowledge is connected to when and where these interactions are enacted.

Regarding factual IDN and complexity, designing interactions with kairos encourages three different insights. One, that through each replay comes a moment for persuasion wherein new knowledge can be presented; two, each ludonarrative interaction occurs in a prescribed space at a designed time and this spatial-temporal timing can impact epistemological discourse; and three, that kairos encourages designers and developers to consider a plurality of social and cultural contexts (Rita-Procter, 2018) for situating rhetorically effective epistemic ludonarrative interactions.

### Neo-Sophist Kairos in *The Changing Same*

Utterances noted for kairos occur when the producers discuss the timing of an interaction at the most opportune moment for persuasive and emotional effect. For example, when Michèle Stephenson says, “You know the moments of engaging directly with the user, are the moments of the heightened emotion. And they range from anger to curiosity, to fear and wonder.” These moments were often achieved once eye contact was made. As Stephenson continues, “You can feel anger and emotion when you’re being confronted, challenged—when your own truth is being challenged. You can connect to that at some point in your life, where you felt that. So, it is about plumbing that feeling in

these different moments.” These become the moments where, if production timelines had allowed, branching dialogue options would have occurred. However, the producers plan to implement this level of interactivity in episode two. Indeed, as originally written, these moments were meant to use voice-recognition technology to facilitate discourse between the interactor and characters. However, as Brewster laments, “this was supposed to be a dialogue, as often as possible, to mitigate the fact that the audience could be looking elsewhere. So, what you see are remnants of attempted conversation.”

The producers also discussed the challenges of composing compelling kairotic moments in an immersive 6DoF space. At a high level, Stephenson says, “Yes, the user has some freedom, but I think the word freedom is a little misleading. There’s choice, but there’s intentionality for us behind each of those choices.” Brewster comments, “Like what are the tools that I use, right, as a storyteller, to convey emotion? One is eye contact. And so, and that is particularly difficult in the 3D framed Universe when I could be watching a flower behind me. Or I cannot even see the action that is the spark or the inciting factor.” Indeed, all three producers felt like the 3DoF version was perhaps more effective for the discourse. Brewster continues, “what I found is that when you put people in three degrees, they were more emotionally involved. We limit their options.” Elayat echoed this.

Another key aspect of kairos, connected to *enargeia*, in *The Changing Same* is the use of the fireflies. As this statement from Elayat hints, “And [the fireflies] are technically guiding you, so they’re kind of a benevolent force. They are sometimes guiding you to look, but it wasn’t meant to be, ‘hey, look there’s this world tearing right in front of you’ [. . .] They’re kind of foreshadowing, ‘hey, we’re going to go on this journey’ [. . .] whenever you see them, actually, there is about to be a time shift” The fireflies are guides, *enargic* in their structure to represent hope, and guide the interactor through different rhetorical moments of kairos.

While the opportunity for kairos was in some ways limited by the affordances of VR technology and production timelines, opportune moments for discourse were designed and intentionally presented. As Elayat notes, “using several things at the same time, to communicate at that moment, something that is the user journey”. Future episodes of *The Changing Same* may be more constructive to discovering the persuasive effect of kairos for epistemic ends. However, Stephenson highlights how this is connected to the rhetoric of *mêtis*, “there was a lot of thought put into having the user plead guilty or do I plead not guilty, and because of that agency, that agency that we allow you to have, determines what you’re going to see next in the same way as in real life. You know these are the stakes. I feel that the VR experience allows that immersive, very personal decision to be immediate for the user.”

### Mêtis and Embodied Narrativity in Virtual Reality Interactive Factual Narrative

Rhetorician Michelle Ballif invokes Donna Haraway’s *Cyborg* (Haraway, 2006) to describe how individual interactors enact and embody the postmodern rhetorical practices. She refers to this as the third-sophistic. Ballif notes that interactors inhabit their

physical body and embody their communication networks in our contemporary moment. The translocation of sense-making from the individual to the individual-through-networks demonstrates a new kind of discourse and embodiment of knowledge. This discourse places the interactor and their body (ies) in a position of never-ending rhetorical sense-making. That through each medium, “different rhetorical moments occasion different rhetorics” (Ballif, 1998). The interactor engages in *mêtis*, “a knowing, doing, and making not in regards to Truth (either certain or probable) but in regards to a [...] situation such as our postmodern condition” (Ballif, 1998). In short, the rhetoric of possibility, the use of antithesis, is a rhetorical process—not one that ends in some final ideal of truth—but launches interactors and their cybernetic bodies incessantly back into the process of sense-making. The interactor, bound up in a cyborg relationship with these new technologies, embodies and enacts these epistemological practices in their never-ending dialectic with reality. *Mêtis* rhetoric recognizes that all rhetoric is embodied and enacted by an interactor (Dolmage, 2009). As rhetorician Debra Hawhee notes, “thought does not happen within the body, it happens *as* the body” (Hawhee, 2004).

Cognitive science supports the idea of *mêtis* rhetoric and Debra Hawhee’s insights on how thought moves through the body. Psychologist William James’ book *Principles of Psychology* discusses how our internal recognition of an increased heart rate, adrenaline spike, or gastrointestinal distress informs how we make meaning of our external world. Lisa Feldman Barrett and colleagues have identified that emotions are felt through the body through such interoceptive stimuli (Barrett et al., 2004). Cognitive Scientist Anil Seth has identified that such interoceptive stimuli are often inferred by individuals to be based on external stimuli, what is happening in the world around them, and are so used to make sense (Seth, 2013). Connecting these cognitive and psychological insights to rhetoric recognizes that digital and virtual means can be used to stimulate these same interoceptive stimuli. *Mêtis* highlights that such use can be rhetorical when it is meant to persuade an individual to some course of action. VR factual narratives play upon these mechanisms in the process of sense-making for the interactor.

VR experiences presenting factual narratives present a very immediate representation of this epistemological discourse. The interactor is often literally embodied in an immersive experience representing a factual subject. Immersive journalism scholar and practitioner Nonny de la Peña has referred to this embodiment as “digital embodied rhetoric” (De la Peña, 2014). However, the nature of this embodiment can be ethically (Nash, 2018) and politically problematic (Schlembach and Clewer, 2021). At times, interactors bring their own bodies; other times, they are given hands and even limbs (Bevan et al., 2019). In all cases, the interactor, embodied in the immersive space, utilizes their sense-making skills in the never-ending process of *mêtis*, embodied epistemic rhetoric. Given the embodied nature of VR narratives, Yotam Shibolet’s work, his proposed idea of embodied narrativity (Shibolet, 2019), helps connect narrative and *mêtis* rhetoric.

Shibolet builds upon the work of Priscilla Brandon and Fleur Jongpier. Brandon suggests that the narrative self and the interactor’s body are intertwined. She states, “the relationship between the body and the narrative self is interactive rather than unidirectional: not only does our body shape our narrative self, but our narrative self also shapes our body.” To clarify, Brandon suggests that narrative shapes our self-understanding of our bodies and how they fit into our personal narratives. This connection is also explicitly illustrated in VR, wherein the designed narrative encourages the interactor to move their body in particular ways to access diegetic material. Jongpier suggests, “Embodiment and narrativity [...] are not two separate components, but are integrated into one unified first person perspective, which is why many of our experiences are genuinely, rather than merely superficially, embodied narratives.” Shibolet broadens this work and tacitly connects it to sense-making. He states, “embodied narrativity, the narrative quality of experience, is enacted directly through [the] perception of the world, and the skillful understanding of tangible interaction that comes to bear in it [...] in a relationship of dynamic circularity [...] actualized in our active, immediate consciousness of [the] environment” (Shibolet, 2019).

From a Neo-sophist perspective, one that integrates the work of Shibolet, Jorash, and Ballif, I suggest that such embodied narrativity is also a *mêtis* rhetoric. Rhetoric has a body, and in the case of a VR factual IDN, that body is that of the interactor and how that body is rendered in VR. The interface of VR, its capacity to track the human body and integrate and capitalize on more of the data it produces than previous media forms, enables a more immediate rhetorical discourse. Accordingly, how an interactor moves through a VR experience is the epistemic rhetorical tactic of *mêtis* played out in the Process level of the SPP. As an interactor experiences several potential factual narratives instantiated from the protostory in VR, they engage in interactions that present new perspectives on the subject. Embodied in the immediacy of an immersive environment, their enactments of these narratives are bound up in their spatial and embodied cognition. Such spatial cognition, the use of the somatic within an interactive discourse, is sense-making.

VR practitioners have rhetorically marshaled the concepts of immersion and SoP to this same rhetorical effect (de la Peña et al., 2010; Kilteni et al., 2012; Sundar et al., 2017). As Murray notes, “enacted events have a transformative power that exceeds narrated and conventionally dramatized events because we assimilate them as personal experiences” (Murray, 2017). However, the assimilation of knowledge from these personal experiences is questionable. Koenitz notes this when discussing the effectiveness of serious games to address complex issues (Koenitz, 2019). Rebecca Rouse has observed that the use of technology to “change minds” in this way plays into fantasies of privilege and technological determinism that obstruct actual change from occurring (Rouse, 2021). And, in the case of traumatic experiences, can even turn interactors away from integrating knowledge (Fisher and Schoemann, 2018). Further, interactors may have a narcissistic response to their experience and integrate knowledge about themselves instead of the piece’s subject (Clune, 2016; Nash, 2018). Further, the interactor’s

agency within a VR factual IDN is a rhetorical discourse. As a rhetorical discourse, the intention of the producer as rhetor may not be successful. The interactor might play against the experience (Sicart, 2011) or interpret the subject in radically unexpected ways (Hall, 2007; Koenitz and Eladhari, 2021). So, while an interactor's embodiment, immersion within the scene, can "teach ways of being in the world" (Murray, 2017), the integrity of the knowledge created and the effectiveness of the knowledge can and should always be questioned. The proposal, that immersion can motivate a change in behavior through *mêtis* is a rhetorical claim.

### Neo-Sophist *Mêtis* in *The Changing Same*

Utterances noted for *mêtis* occurred when the producers discussed the importance of embodiment within the VR factual IDN for sense-making. For example, when producer Yasmin Elayat states, "we say the participant, because you are a part of this—you are part of the narrative that you are entering, that you are going on this pilgrimage this—we're calling it an American pilgrimage—through 400 years of history." Note that a body is not rendered for the interactor and they are not given the role. They bring their own body and identity into the space. Using the Oculus Quest with hand tracking does render transparent hands in the scene but that is the only visual-spatial embodiment rendered. The body in space was discussed by Stephenson, "what do we want the body to do and how do we want it to appear in the space and how can we challenge the form with that." Further, Stephenson saw VR as enabling a focus on the interior world of the interactor, "One of the things that is [...] definitely influential with *The Changing Same*, that we've not seen or experienced in other VR projects, has to do, with us coming in [...] and looking at emotion being at the center." Getting at this emotional center was related to establishing eye contact in the piece. As Brewster states, "I have to convince them to look in my eye."

When considering the interactor's body, Brewster believes they bring their own into the experience, "I see my body, their body, as their body. In other words [...] we define the audience as us." He continues, "So it is very clear to us what the audience looks like. Because we're our first audience [...] So what do we actually see: I saw me talking to [the characters]." As Elayat notes, "Everyone is going to add a little bit of their own flavor to it, each person will have a unique flavor of the experience depending on what they're looking at and what they're doing." The way the interactor perceives their embodiment impacts this.

Elayat's statement highlights the importance of this *mêtis* embodiment concerning the 3DoF versus 6DoF versions of the experience, "I feel too tall in the 3DoF actually, and people that are taller than me feel too short, and like whatever, so it is an unfortunate problem [...] that's when you lose some of the grounding in 'I'm actually there.'" *Mêtis* impacts the user's SoP and engagement with the discourse. Yasmin continues, "Everywhere else [...] you can walk to Harriet and get slapped by her skirt if you want. You know you can walk up to Lopez [the public defender] if you're in the jail and really get in her face if you want, or Lamar. We can't in the 3DoF."

This understanding of embodiment is instrumental to the factual narrative and how the producers constructed it. Elayat states, "This person is no longer the audience [...] Whether or not you're interacting, I think it is the experiential tools that guide that. It is a user journey, like none of this is a film, it is a user's journey through an experience. How you choose to guide them or shape their journey is the VR narrative." Her statement highlights the participatory discourse between the factual IDN designer and the interactor. Elayat also makes a statement that draws our attention to the importance of volumetrically captured bodies for communicating knowledge.

When you're talking about our real world, real history, real people, real stories, we believe you need real people. [...] When you're having this experience, if you're talking to a puppet CG character versus like a real person who's—even if volumetric capture might not be at the level it needs to be, or like is not the highest quality in the world and doesn't have some of these digital artifacts—you still feel there's a real person, a real human, and you're still getting that kind of connection or real emotion that you would get from theater or watching films. Like just us talking, the aspects of how I am, you know all the things, like my affect, you lose that once you start abstracting humans into these CG puppets.

Lastly, Elayat and Stephenson draw our attention to the spatial cognition and embodiment that is bound up in *mêtis* work. As Elayat states, "It doesn't have to necessarily mean that you have to like touch things to interact, but just you feel like you're there, [...] there's been studies and research done on the fact that the way VR works is that it touches the part of your brain where the memory center is." Stephenson makes the following statement, "[The VR experience is] hitting you at different levels, both in the brain and in the heart and just emotionally and physically so that you're registering storytelling in a different way [...]. So, for me, I felt attracted to it because of its immersive sort of brain-playing effects." This intention, connected to *mêtis*, has been claimed as effective in numerous papers on the cognitive aspects of VR (Bailey et al., 2011; Stone et al., 2011; Coyle et al., 2015; Sundar et al., 2017).

### The Epistemic Rhetoric in *The Changing Same*

Based on statements made in the interviews, the rhetorical work the producers are engaged in can be understood through the Neo-sophist tradition of using narrative discourse epistemically. They rely on the aesthetic affordances of immersive media to help interactors understand the complex history of 400-years of racial oppression in the United States. Through narrative, they invoke the rhetoric of the possible to present a history of patterns through the structures of magical realism. This history uses antithesis, an alternative to the inequity of the present, to establish an equitable future. In the tradition of other VR factual IDN creators, the producers use *enargeia* to make these



possible worlds actual as perceived by their interactors. Statements that reflect a discussion of *enargeia* connect to fireflies, Lamar's body, the environment, and the use of volumetric capture and photogrammetry to establish an evidentiary authority. The producers all produced statements about how the enargic choices were meant to create meaning and knowledge. A key to this process was choosing the right moments, the opportune moments for interactions, and diegetic material. These kairotic moments were not fully realized, but all the producers discussed their importance, especially in terms of epistemic discourse. Kairotic moments include the initial meeting with Lamar, the confrontation by the police, the interaction with the public defender, the shift to the 19th century prison, and the denouement with Harriet. Lastly, statements aligned with the embodiment of the interactor in the scene, how that body moved, reflected *mêtis* rhetoric. In VR, how the user is embodied in the scene, how they move their body through it, and how they are emotionally influenced is connected to *mêtis*. The producers implemented these different rhetorical tactics through aesthetic choices. As Elayat states:

I feel like there's like kind of naivete with VR work where they're, 'like interactivity equals more [...] embodiment, empathy, all of that' [...] And I actually don't believe that. I think there is something very simple happening. I am talking about the police car scene [...] That scene, where you're stuck in the car and Lamar is about to get pummeled by the police [...] is a great example of all these layers we're talking about. It is human, it's volumetric capture, human performance, you feel like you're part of this heated up exchange, it is also [...] using these experiential of tools we're talking about [...] we're using crazy intense lighting, we're using physics, we're playing with the physics and making time and the world kind of stretch, and it's meant to feel like, [...] tearing your body from your limbs, and so all of this is [...] using several things at the same time, to communicate at that moment, something that is the user journey [...] You're using all these different layers where it feels like you are affecting the user through [...] their brain or heart.

A Neo-sophistic analysis looks at how factual IDN constructs knowledge by analyzing how designers and developers rhetorically use technical and aesthetic affordances to influence interactors through their 'brain or heart.' It is a perspective that recognizes that a rhetorical process is at work when using aesthetic affordances to create knowledge. As Elayat states, it is more than interactivity and embodiment—it is the rhetorical use of those affordances to create compelling experiences that result in knowledge.

## Neo-Sophistry and the System-Process-Product Model

A Neo-sophistic approach to factual IDN highlights the opportunity to discover that what might be possible can

become actual through a digital, interactive, epistemic rhetorical discourse. It is not that truth proceeds rhetoric, but instead, that rhetoric through interactive digital storytelling is a subprocess in the dogged pursuit of knowledge. How this pursuit plays out through the SPP model informs the epistemological process of a factual IDN.

At the System level of the SPP, we consider the software and hardware combinations that enable an IDN to be run. This includes the peripherals that gather information from and about the user. In addition, at the System level, exists all potential narratives that may be instantiated by that system (Koenitz, 2015). Koenitz refers to these combinations as a *protostory*—they contain the necessary ingredients for a narrative to be instantiated. The Neo-sophistic approach recognizes two rhetorical aspects at play at this level. First, for a factual IDN, that each potential narrative instantiated from a *protostory* is an implementation of *antithesis*, it is a presentation of the possible. At this level, the elements of *enargeia* are composed into vivid scenes and settings within the instantiated narratives. The fidelity of these enargic elements can be marshalled by practitioners to rhetorically claim evidentiary authority. Further, the instantiated narrative world is given fidelity and actuality through *enargeia*'s rhetorical structures and mechanisms. In VR, the interactor's SoP is directly connected to their *mêtis* engagement and perception of these scenes at the Process level of the SPP.

At the Process Level of the SPP, an interactor enacts these various narratives through ludonarrative interactions that occur at specified moments. These moments structure *kairos* and rhetorically guide an interactor's interpretation of the narrative. Christian Roth and colleagues situate this process of interpretation in a hermeneutic strip that runs through the SPP (Roth et al., 2018a). Designers structure *kairos* for the "bottom hermeneutic circle" (Roth et al., 2018b). Within this bottom circle, interactors interpret moments in the currently instantiated factual IDN. The IDN then demands interaction at these designed opportune and rhetorically powerful moments. This occurs in the "upper hermeneutic circle" where a player interacts and the system interprets that interaction (Roth et al., 2018a). In VR, these interactions are manifested as a *mêtis* rhetoric. The system requires the interactor to move their body in a prescribed way to progress the instantiated narrative. It is an epistemic-rhetorical influence enacted at kairotic moments. These moments for ludonarrative interaction occur in composed places, at designed times, for the most significant rhetorical impact. This kairotic timing is an epistemic-rhetorical aspect of the double hermeneutic that occurs in factual IDNs over time, through multiple moments for interpretation. In VR, the embodiment of the rhetoric through the interaction is a *mêtis* rhetoric, deeply connected to somatic intelligence and embodied cognition.

The Product of the SPP Model has been understood as a retelling (Eladhari, 2018), a material object such as a recording (Koenitz et al., 2020), and as an internalized cognitive model of complexity in a discussion paper (Knoller, 2020). In producing knowledge about complex phenomena and subjects, I agree with Knoller that the product can undoubtedly be an internalized cognitive model. I believe this is especially true with factual IDNs

that actively create belief in how they have presented their subjects. With this end goal in mind, I am recognizing Janet Murray's concept of transformation as not just an aesthetic quality of IDN, but a rhetorical one as well. The use of antithesis, enargeia, kairos, and mētis in a VR factual IDN are tactics of composition and argumentation for representing reality in a particular manner. When the interactor integrates the IDN's representation of reality into their life, narrative as a rhetorical epistemic discourse has succeeded. The factual IDN becomes a knowledge product.

## Continuing the Neo-sophist Discourse on Rhetoric in Representations of Complexity through Interactive Digital Narrative

Those interested in future work looking at the rhetorical use of narrative as part of an epistemic process can use this proposed Neo-sophistic approach. Further, interested scholars might identify, both in the speech of VR factual IDN producers and the experiences themselves, which Neo-sophist rhetorical tactics are being implemented. Additionally, future work might look at Walter Fisher's Narrative Paradigm for Communication. Fisher's paradigm recognizes that storytelling is how humans communicate and understand their world. In Fisher's words, "the world is a set of stories which must be chosen to live the good life in a process of continual recreation" (Fisher, 1985). Further, that through narratives we, [constitute] the fabric of social reality [...] 'rhetorical fictions', constructions of fact and faith having persuasive force" (Fisher, 1984). Fisher's work may illustrate how a retelling that is produced as the product, at the Product Level of the SPP model, distributes knowledge through communication and may add strength to the argument that IDNs can be used to model complexity and produce knowledge that can be shared about such subjects.

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If we do not address how producers of factual IDN implement aesthetic affordances rhetorically, we may miss the political consequences of experiences that address complex subjects. Worse, the political consequences we highlight may be trivialized as subjective bits of postmodernity. Neo-sophist critique gives us the tools to get ahead of that claim, to name the rhetorical mechanisms used by factual IDN producers, and how they work. This approach seems even more critical in the VR space, where designers and developers of factual IDN frequently make knowledge claims.

## DATA AVAILABILITY STATEMENT

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found below: <https://drive.google.com/drive/folders/1quURY2ScNt8xM0r9-Q6KbsmKd5vesZe4?usp=sharing>.

## ETHICS STATEMENT

Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

## AUTHOR CONTRIBUTIONS

JF has produced all the material for this work.

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