

On Memory and Figural Thought

ASHLEY ROSE MEHLENBACHER
University of Waterloo

Abstract: In this article, the rhetorical figure of prolepsis serves as an illustrative case to examine how the ancient threads of memory craft can explicate the rhetorical operations of figures. In the *ars memoriae* tradition of antiquity and the medieval period, memory was the chief tool in invention. Memory craft is principled upon organization, routine, and structure. It also draws on our emotions to operate, and that which surprises us for its uniqueness or other features becomes more memorable. We recall that which is unique or perhaps the departure from the conventional language we encounter with a well-placed metaphor or the repetition of anaphora or epistrophe. Memory, through its inventive function, has much to tell us about how rhetorical figures underlie operations of the mind. Rhetorical figures reveal stylistic operations that allow for compositional activities, for invention and persuasion, and figures are rooted in the workings of memory revealed by the tradition of *ars memoriae*.

Keywords: memory, style, rhetorical figures, cognitive rhetoric, prolepsis

Résumé : Dans cet article, la figure rhétorique de la prolepse sert de cas illustratif pour examiner comment les anciennes traditions de l'art de la mémoire peuvent expliciter les opérations rhétoriques des figures. Dans la tradition de l'*ars memoriae* de l'Antiquité et du Moyen Âge, la mémoire était l'outil principal de l'invention. L'art de la mémoire repose sur l'organisation, la routine et la structure. Il s'appuie également sur nos émotions pour fonctionner, et ce qui nous surprend par son caractère unique ou ses autres propriétés devient plus mémorable. Nous nous rappelons ce qui est unique ou ce qui s'écarte du langage conventionnel que nous rencontrons, que ce soit par une métaphore bien placée ou par la répétition de l'anaphore ou de l'épiphore. La mémoire, à travers sa fonction inventive, a beaucoup à nous apprendre sur la façon dont les figures rhétoriques sous-tendent les opérations de l'esprit. Les figures rhétoriques révèlent des opérations stylistiques qui permettent des activités de composition, d'invention et de persuasion, et elles sont enracinées dans les mécanismes de la mémoire révélés par la tradition de l'*ars memoriae*.

Mots-clés : figures rhétoriques, prolepse, mémoire, *ars memoriae*, persuasion, invention

INTRODUCTION

In this article, the rhetorical canon of memory is explored through its relationship with rhetorical figures. Rhetorical figures of speech and rhetorical figures of thought have received attention for the cognitive operations that they underscore. The work of important rhetorical scholars such as Jeanne Fahnestock, Randy Allen Harris,¹ and Jordynn Jack illustrate that figures are foundational to our arguments, that figures mark cognitive affinities, and that those cognitive operations unfold across and within contexts. Memory work has interesting intersections with these programs of research, and this article explores some of those intersections. First, examining the canon of memory and its important flourishing in medieval monastic practices illustrates the complexity of the acts of memory and recollection. Then, looking at the relationship between memory and figuration, the article examines how these two traditions might mutually inform one another in the modern context of rhetorical studies of figural logic. Finally, to closely trace this relationship, the figure called prolepsis serves as an illustrative case. More specifically, the suite of figures that we might call prolepsis serves as a case. Work to untangle different figural strategies collected under the figure of prolepsis originally served to contribute to conversations about how figures could be rendered computationally tractable (Mehlenbacher, “Rhetorical Figures as Argument Schemes”) and later to chart the complexity of figures for their own understanding (Mehlenbacher, “The Proleptic Suite”). To begin, the canon of memory requires some mapping.

ARS MEMORIAE: THE HIDDEN FOUNDATION

Memory is an enormously complex subject in the history of rhetoric² and more broadly in psychological studies. Yet, as Mary Carruthers notes, “rhetorical *memoria* remained notably under-theorized, especially in comparison to invention and style” (“Rhetorical *Memoria*” 209). Commenting on the handbook

tradition and rhetorical training, she speculates that because memory's role was understood as foundational for the other aspects of rhetoric, memory itself wasn't intensively examined. In the *Ad Herennium*, the discussion quickly turns to practical matters of *techne*, and most pre-Ciceronian accounts (here we can include the Sophistic *Dissoi Logoi* and, notably, Aristotle's *Topica*), Carruthers explains, were pedagogical in their focus and thus most attentive to the aspects of *recitatio*. Carruthers reminds us that Cicero himself did not discuss *memoria* in *De Inventione*, beyond his important linking of memory and the virtues through prudence.³

Further, the "pre-Ciceronian" memory techniques, notably that of the *Rhetorica ad Herennium*, are not so directly influential to the later traditions of *ars memoriae* as exemplified by monastic practices: "in the monks' meditational craft—which they speak of as *memoria* or *memoria spiritalis*—the art of memory described by the *Ad Herennium* played no discernible role at all" (Carruthers, "Rhetorical *Memoria*" 213). Further, she notes that replications of the vocabulary from *Ad Herennium* in the *memoria spiritalis* tradition may rather be attributable to Quintilian's use of it in the *Institutio Oratoria*. Rhetoric, for all the significant theoretical implications of memory and its pedagogical importance among the five canons (although perhaps subordinated to the service of delivery), was not especially concerned with its underlying principles. However, medieval monastic practices embodied an important approach to the role of memory within rhetoric and so the medieval *ars memoriae* becomes of special interest when exploring the significant role of memory in the role of figurative thinking.

Figures have received considerable attention in the history of rhetoric, particularly through the so-called "handbook tradition," and they continue to interest contemporary rhetoricians, as well as linguists, philosophers, literary scholars, computer scientists, and cognitive scientists, among others. In rhetoric, Jeanne Fahnestock's essential work rejects value-added approaches, offering a model of figural logics, and Randy Harris (see Harris and DiMarco) adds to

her approach through a cognitive-rhetorical framework, with most recently Jordynn Jack situating the tradition broadly within a material-rhetorical-ecological framework. Jack sets out with a key question: “Where do rhetorical figures reside?,” finding rhetoricians have offered “multiple matrices in which they [figures] may be instantiated: within the brain, within physical objects and images, and/or within organism–environment interactions” (1).

In this paper I wish to return to medieval memory craft to explore how figures are realized through acts of memory work and then build on these insights with the work of modern scholars studying figures. Although different types of figures operationalize memory activities somewhat differently, figures are rooted in the workings of memory revealed by the tradition of *ars memoriae*. Organization of perceptions in this tradition involves the recording and arrangement of sense impressions, the act of memory, and the act of recollecting (Carruthers, “Book of Memory”). Memory here has aspects of the material conditions we inhabit and engage. Memory was also understood to be influenced by our emotions. That is, we recall the unique or unusual, possibly grotesque, as the use of medieval monsters as memory aids illustrates, or as when we recall the departure from conventional language in a well-placed metaphor or a repetition such as epanaphora, for instance.⁴ However, memory was also embodied, and the particulars of one’s experience and mind are crucially important to the work of memory craft.

MEMORY AND FIGURES

Memory is central to how rhetorical figures function and, more broadly, to the process of rhetorical invention itself. Although here I divide the processes of memory work and rhetorical figuration for the purposes of investigation in the history of rhetoric and *ars memoriae*, they are, in fact, not so easily distinguished. In classical texts such as the *Ad Herennium*, one might find a discussion of

memory and figures. Walter J. Ong's theorizing of memory, too, provides us some account of the importance of figural constructions, notably those that we might characterize as schemes, with their morpho-lexical characterizations, and as tropes, with their semantic characterizations. "Think memorable thoughts," indeed (Ong 34; refer to note 5 for discussion). But the monastic tradition is not primarily oral, and in it the *ars memoriae* is mostly concerned with the memorization and recollection of written texts.⁵ Further, beginning a study of the relationship between memory and figuration in the medieval period not only allows us to explore a more robust theory of memory, but also serves as something of an antidote to what are sometimes more speculative accounts.

Although *ars memoriae* posits a series of techniques to improve one's *memoria artificialis*, commenters on memory commonly acknowledged that the strategies must be adapted to the individual (see Carruthers, "Rhetorical *Memoria*" 219; *Book of Memory* 64). For instance, we might find that an individual tailors the visual structure of the places they construct and where to find arguments. In the venatic model Quintilian provides in the *Institutio Oratoria*, the rhetor finds the location of arguments much as one succeeds in finding the locations of "bird or beast" by knowing their *loci* (Carruthers, *Book of Memory* 62.). In this process of hunting for arguments, we create our presents and futures, as well as our pasts. Carruthers explains that our experiences of time "are mediated by the past" but that this conception of the "past" (in the tradition of medieval psychology as described and in contrast to Renaissance and contemporary understandings) "is not itself something, but rather a memory" (Carruthers, *Book of Memory* 193). Or, as Nathan R. Johnson puts matters plainly, "Memory is past, present, and future" (136). We find arguments through a process of recollective work and use that for our present and future decision-making, for example. The patterned work of memory, which, through the recombination of memory and later recollection, links the past and our collection of memory to the way our inventional work—our

arguments, anticipations, etc.—shapes our decision-making, can be examined through rhetorical figures.

Such conceptions of past as memory are essential in understanding how figures create the conditions for their suasive inducements. Consider, for instance, the figure that will serve as the illustrative case for this essay: prolepsis. Prolepsis is a figure of anticipation in which a future time is rendered in the present to induce a persuasive effect. Future times are crafted from one's experience and recollection of the past. For example, we might consider how anticipations of climate impacts are rendered through our understanding of climate trends (Mehlenbacher et al., "Proleptic Logics"; "Prolepsis and Rendering"). Fundamentally, how the persuasive inducements of a future time are brought into the present is also contingent upon past-as-recollection.

But it is not only those figures we might categorize as figures of time that illustrate the importance of memory in figuration. Indeed, timing is an essential characteristic for a repetition to be, well, a repetition. We need to be able to remember a previous instance to establish a pattern. Too much distance (rendered through syntax, visual space, or any other semiotic mode) and the repetition loses its invocation of intentional patterning. Or consider the pace of an asyndeton where conjunctions are omitted and thus change the timing of the construction. Even among those figures we can categorize as tropes, time is implicated, such as the importance of social timeliness in euphemismus: choosing when to use it and knowing the appropriate term to use in a given historical moment. Consider also the broader importance of time for theories of figures as a departure from more regular or common forms of expression or for the kairotic deployment of figures.

AN ILLUSTRATIVE CASE: THE PROLEPTIC SUITE

Memory, as a rhetorical operation, is central to the inventive work of figures we can classify under the proleptic suite, and it certainly has important implications for other figures as charted in the rich tradition of figural studies. Prolepsis illuminates the important role of memory and memory craft in rhetorical figuration, relationships supported by current research in the cognitive and psychological sciences. Prolepsis itself relies on aspects of memory for the kind of figural thought here suggested. Through a combination of experience, memory, and sense perceptions that invoke our search capacity for typifications that alert us and call for a response (cf. genre in Miller, “Genre”), prolepsis marks the movement from intuitive sense to the rhetorical worlds of self-persuasion and the persuasion of others. Figurative thinking is integral to the kinds of structuring underlying this form of memory work, as well as to the recollection and anticipatory thinking required for inventional work.

Prolepsis is a figure well-aligned with the dynamic nature of memory craft. Indeed, fundamental to the operations of this figure is navigating to different temporal locations—most notably when characterizing the figure, the future. Prolepsis is often defined by its flashforward, where the future is anticipated and then rendered through inventive work as a vision of some future time. In fiction, the figure can be found as a presaging of events to come, and in biblical and religious texts as a prescient vision of the future. In common usage a variety of prolepsis can be found in environmental warnings, for instance. Each of these varieties of prolepsis relies upon anticipation as a rhetorical strategy. And each variety pairs anticipation with a secondary feature. As a figure of anticipation, prolepsis is an important figure, but one that presents in multiple forms (hence “Proleptic Suite”).⁶ We might outline three subtypes of prolepsis:

- *Prolepsis-occupatio*, which pairs anticipation with rebuttal;
- *Prolepsis-ampliatio*, which pairs anticipation with a temporal disjuncture where future-is-fact; and
- *Prolepsis-praemonitio*, which pairs anticipation with a proximal urgency as well as a moral warning.

It is notable, however, that as one of many hundreds of figures, prolepsis is indeed merely one of the many forms of figural logics that could be productively examined through the lens of memory craft. What makes prolepsis instructive is partly practical insofar as subtyping has provided a detailed account of the figure's different functions to induce persuasive effects. Prolepsis, as a figure of thought, is also a hard case, as it defies easy characterization through morpho-lexical patterns, and is thus not singularly focused on features of memorization we know to be essential to *memoria verborum* (memory concerned with exactness or verbatim accounts), such as repetition. Rather, prolepsis helps chart how *memoria rerum* (memory as concerned with things or ideas) as a function of memory craft can tell us much about how figures induce rhetorical effects upon an audience and upon ourselves.⁷ It might seem paradoxical that prolepsis, concerned with the future, can tell us something about memory. Memory, however, is the foundation of this figurative work, as we will see.

Reviewing the varieties of prolepsis in the proleptic suite can further illustrate how operations of memory as articulated in memory craft can contribute to the understanding of figures. Each variety of prolepsis demonstrates the complexities of the work that figures undertake and how such operations are not only cognitive processes but also constellations of complex cognitive, social-rhetorical, ecological, and material configurations. Here the understanding is by way of insights from memory craft, including those about the importance of segmentation of information (or what cognitivists might call “chunking”), of experience from the many, of emotional resonances, and of the material (sometimes embodied or tactile). While overall the argument here is that figures rely on the work of

memory craft and can thus be helpfully illuminated by its insights, there are numerous intersections of these operations entailed with one another that we will acknowledge along the way.

Prolepsis-occupatio

Of the varieties of prolepsis outlined in the Proleptic Suite, prolepsis-occupatio, or prolepsis as anticipation and rebuttal, is marked by refutational correlations (some lexicosyntactic; e.g., the conjunction *but* or *yet*, for instance, although these are not required), in that the figure anticipates and then rebuts the arguments of another speaker. As with procatalepsis, this instance of prolepsis relies upon rebuttal as a key feature of its argument strategies. The conflation of prolepsis in all its varieties and procatalepsis is largely the result of the so-called “handbook” tradition of categorizing and listing rhetorical figures while then prescribing and proscribing their use at various stylistic levels for different purposes. Although some of these handbooks were original in their systemization, many were derivative, and through a combination of the two forms, the figures of prolepsis and procatalepsis resulted in generalization of the term *prolepsis* in the rhetorical traditions.

Examples of such anticipation and rebuttal can be found in a variety of genres, from political speeches to eulogies. President Barack Obama, in his eulogy for Representative John Lewis, anticipates and rebuts arguments that attempt to ignore the critical political moment to which Representative Lewis’s life of work spoke:

Now, I know this is a celebration of John’s life. There are some who might say we shouldn’t dwell on such things. But that’s why I’m talking about it. John Lewis devoted his time on this Earth fighting the very attacks on democracy and what’s best in America that we are seeing circulate right now. (qtd. in Lantry)

In his eighteenth-century treatise on figures, Thomas Gibbons suggests that,

By this Figure the speaker gains the reputation of foresight and care. The Prolepsis shews that the orator is master of his subject, and that he has full view of its connexions and consequences, in that he sees what may be objected against, as well as what may be alleged for his cause. (199)

Gibbons continues to account for the virtues of this figure, explaining that it “manifests the assurance of the speaker, that the truth and justice are on his side: he fears not an objection; he starts it himself, he dares to meet and encounter it, and will shew his audience how effectually he can disarm and dissolve it” (199). To do so, one will likely conclude, some understanding of the forms of arguments that might be levied in response must be considered and then accounted for in one’s anticipatory rebuttal. Accomplishing this requires not only the rhetorical strategy of anticipating one’s audience—a prolepsis—but anticipating and articulating those anticipations. In doing so, one brings the audience forward in time to establish with them the experience of an argument that will, when the opponent speaks, have become part of their own memory. Here we have both the rhetor’s memory and the audience’s memory operating together as a social memory, but the preoccupation here is with the individual experience, owing to the nature of memory craft. The craft here is the ability to recall from one’s own experience the kinds of arguments likely to be raised by a certain audience on a certain subject. Having, as Gibbons suggests of “truth and justice,” a constellation of knowledge from which one might draw is important to the rhetorical effect of this appeal. Without a substantive storehouse of knowledge, the anticipatory act is unnecessarily speculative, and more likely to result in rhetorical failure.

Figures, however, can also be “incorrectly” used, including prolepsis-occupatio. Gibbons gives this warning:

But by the way, let the speaker take heed how he raises an objection that he cannot entirely refute: if he does this he will be like a man who vain-gloriously challenges an enemy to fight with him, and urges him to the combat, and then is shamefully overcome by him. And besides, if an objection is not well answered, the whole cause may be brought into suspicion, and the truth may suffer through folly. (199)

There may, too, be more than folly that undermines the virtuous uses of prolepsis-occupatio. In some cases, the figure might be immorally but effectively deployed. Describing techniques that confidence tricksters use, Paul R. Wilson demonstrates the psychological application of procatalepsis to keep a “mark” (a victim) from doubting the story a con is selling. A common approach, Wilson explains, “is to anticipate conflicting information and address it *before* the mark can stumble upon it himself” (87). Further elaborating, Wilson notes that such a technique, combined with a victim’s hopes, will encourage the victim to “ignore contradictory information” and, thus, make the con’s success more likely. Indeed, we might also consider where such figural techniques may be used by conspiracy theorists to pre-emptively render suspect all countervailing arguments and data. A gloomy prognostication for the uses of procatalepsis/prolepsis-occupatio here, but such cautionaries are important in illustrating the strength of this figural technique as not only crafted in our own memory, but capable of either inoculating or infecting others.

Prolepsis-ampliatio

Chief characteristics of prolepsis-ampliatio, or prolepsis as future anteriority, include anticipation and the presumption of future fact. Literary examples are particularly illustrative of this variety of prolepsis. Consider Browning’s “‘You’re wounded!’ ‘Nay, ... I’m killed, Sire!’” (cited as prolepsis in Lanham 81). The death is taken to be true, and in a literary context it is, as the narrative is predetermined. In such literary uses of prolepsis-ampliatio, the

figure operates quite distinctly from other forms of prolepsis, where the future is always unfolding and not predetermined. Other predetermined examples of prolepsis-ampliatio are commonly found in biblical text (see Robert Harris's work on Rabbi Samuel Ben Meir and Rabbi Eliezer of Beugency's articulations of prolepsis, as well as E. W. Bullinger's *The Companion Bible*). In both cases, in literature and scripture, the operation of prolepsis implies a certainty that is impossible in most other uses. Compositionally, this technique is an important literary operation for narrative, but it is also notable how skillful an author must be in navigating places in a story to construct such temporal unfolding.

Prolepsis-praemonitio

Prolepsis-praemonitio, or prolepsis as presage, relies on the urgency of deliberation among possible futures to generate a rhetorical effect. Such a variety of prolepsis dwells in the uncertain but the (mostly) knowable. The deliberative act itself, as a rhetorical enterprise, implicates moral decision-making, and the deployment of this figure illustrates the numerous ways the figure is put to work. For example, in the midst of a pandemic, prolepsis as presage is commonplace. Epidemiologic models that project disease spread and infection rates presage several possible futures when a range of interventions are applied and, importantly, encourage particular courses of action. Indeed, the presaging of a pandemic echoes through the pages of Bonnie Henry's *Soap and Water & Common Sense*. Henry is the physician and public health officer who led the Canadian province of British Columbia's response to the COVID-19 pandemic, but she had previously been a critical member of the 2003 SARS (Severe Acute Respiratory Syndrome) coronavirus outbreak response team in Toronto, and has worked on outbreaks of TB, Ebola, and anthrax. Her experience forms an impressive storehouse for anticipatory work, for presaging future outbreaks. Henry wrote, for example,

Some experts feel that another influenza pandemic is inevitable and that the capricious, sloppy, promiscuous influenza virus is lying in wait for the ideal circumstances to wreak havoc on populations around the world. As some have said, “The clock is ticking. We just don’t know what time it is.” (86-87)

Writing of H1N1 (the swine flu), Henry asks “Will this new strain be the cause of the next big pandemic or will it just fade away? For now we are watching closely and making preparations for the worst-case scenario. Only time will tell” (93).

Presaging a pandemic, the note about preparations is key to identifying this move as a case of prolepsis, but this example also comes with moral attunements. Although the particular “amoral” virus that will generate the pandemic is uncertain, the certainty of a pandemic demands preparedness, which is a practical and moral imperative. Indeed, as COVID-19 confirmed, the failure to meet this call practically can have morally and medically catastrophic consequences. It is not surprising that this figure often appears in scientific, medical, and environmental discourses, given that, as Fahnestock has noted for science, “[t]here is more pressure to turn an argument into a prediction or an action” (43).

Forensic versus Deliberative Anticipation

Not all anticipations are cases of prolepsis, however—in science or elsewhere. Superforecasters, for example, offer predictions, but these are not necessarily designed for rhetorical effect so much as to anticipate singular outcomes—to simply know the outcome (although there are certainly social-rhetorical dimensions to one’s credibility based on outcomes in this community). In other words, we might characterize those anticipations as a kind of future forensic genre rather than deliberative. Although there may be various subsequent reasons some audiences would want to know the outcome, the primary goal of an accurate prediction is an end itself.

Prolepsis, as a figure, concerns rhetorical inducements in addition to the business of anticipations, predictions, presage, etc. Consider how the figure is used in environmental writing and reports such as the *IPCC Special Report on the Impacts of Global Warming of 1.5 °C* (see Mehlenbacher et al., “Prolepsis and Rendering Futures”). Futures are presaged, and they are knowable, but they are uncertain in that they might be changed if practical and moral action is taken. Indeed, the rhetorical inducement here is concerned with taking action, with choosing a path and its entailed consequences. Moral imperatives in such presages are perhaps made clearer nowhere more than in the Doomsday Clock. An immaterial-temporal moral warning, this figurative clock was created by the *Bulletin of the Atomic Scientists* following the development of nuclear weapons and their material and existential moral threat to the human species. The clock functions to presage the consequences of our present and past decisions through a figurative number of “minutes to midnight,” with midnight representing a catastrophic event caused by humans. The rhetorical construction of future time (minutes to midnight) is to be presently inhabited in one’s decision-making (e.g., policy decisions) but shaped by the past (previous policy and technical decisions such as those around nuclear technology development) as recollected relative to current dangers or risks.

FIGURES, MEMORY, AND THE TEMPORAL ORDERINGS OF PROLEPSIS

Memory might seem an odd pairing with a future-oriented figural technique, given its chief preoccupation with the past. As noted in the previous section on memory and figures, however, it is in the temporal pockets created that the inventive potential for the figure might be uncovered or, again, in a venatic tradition, hunted. Prolepsis and its anticipatory functions, however, draw on the sense-making of experience, which in turn allows for the inventive work underlying anticipation. Prolepsis is illuminating in the case of memory and inventional work because it is distinctly not

oriented to the past. Yet prolepsis is in fact an act of memory, since we cannot know the future (setting aside here literary uses of the figure as prolepsis-ampliatio). Prolepses provide a structure for shaping the memorialized experiences an individual has had into a framework of anticipation that allows the rhetor to build a vision of futures through past impressions. This is to say that prolepsis is not in fact a function of the future, and indeed not solely the present, which has no basis alone for adjudication of the future. Rather, prolepsis is a function of the past, a product of and recollective operation of memory. Whereas figures of repetition, for instance, provide operations to improve retention, prolepsis is an operation that improves recollection. Aristotle, in *De Memoria*, may disagree, understanding recollection to be distinct from the act of memory (see Richard Sorabji's *Aristotle on Memory*). Carruthers notes this distinction, too, as well as the changes to this understanding in the medieval period where digesting of information is a key part of memory work (*Book of Memory* 62, 191). I subscribe to the latter integrated perspective, the digestive model of memory, in this articulation of how prolepsis is generated in the mind.

Let us explore this line of thinking. To recollect, an act of memory, relies upon the gathering and collecting of information we have previously known. This, however, is done not merely through rote recall, such as a computer performs, but to visit the past to address some need in the present. Prolepsis provides a figural logic where recollection happens as an inventive process in service of anticipation. Such anticipations draw from past experience to induce a rhetorical effect by rendering those experiences through the lens of the present need in anticipation of a desired future. Key to understanding the importance of prolepsis and how it illustrates critical operations of memory is an understanding of its temporal configurations.

Rhetorical figuration is traditionally placed within the canon of style, and to understand style as substantive is to locate its inventive function beyond linguistic, verbal, or visual instantiations and to

focus instead on the epistemic function of discursive invention (*pace* Francis Bacon).⁸ In other words, the inventive capacities of figures are fundamental to forms of knowledge. Fahnestock makes this clear in her study of rhetorical figures in science (“Argument,” *Rhetorical Figures*). Figures, she illustrates, epitomize forms of argument, even in domains of science. This is because figures are important to how we formulate not only argument but also thought. In other words, figures do not merely add flourishes, but fundamentally shape our expressive possibilities by shaping our logics.

This is, however, not only a cognitive process. Jack’s question, which I raised in the introduction, about where figures reside encourages us to consider not only the cognitive but the material and the ecological (referring to the living world and our interactions with it) aspects of figurative thought. Memory craft can teach us much about how the material, the ecological, as well as the cognitive are implicated in figural logics. Here then an ecological refrain of the venatic sensibility is recalled, where novelty is not absolute but rather relational to what is known. Carolyn R. Miller explains that “Inventiveness is often associated with a rich store of prior knowledge. The utility and generativity of a *topos* as a source of patterns and relationships depends upon the richness and connectedness of the knowledge available for recombination” (Miller, “Aristotelian *Topos*” 142). The important function of memory becomes clear with this explanation, as memory allows us to combine information. But the information is patterned for such inventive work, and figuration is one indicator of how that operates. We must be able to remember where to find what is it that we wish to retrieve. Figures provide another mechanism for orienting one’s mind through repetitions of various locational arrangements within syntax, for instance, or through the temporal locations marked by the figure of prolepsis. In other words, figures help us to know where to hunt for arguments in the service of compositional or inventive efforts.

NOTES

¹ The author wishes to thank Randy Allen Harris and Jeanne Fahnestock for their suggestions on an earlier draft of this work. Harris's work was powerfully influential in the author's thinking, and the author benefited enormously from participating in projects and events Harris has directed on computational rhetoric and figuration and, of course, because his work shapes important trajectories for rhetorical scholarship. She also wishes to thank Bruce Dadey for his thoughtful and detailed feedback and insights. The arguments are stronger and more nuanced for the insightful feedback. All omissions, infelicities, and faults remain those of the author.

² For an overview of memory rhetorical studies as it has been cultivated in the study of public memory especially, see Bradford Vivian's "Memory: *Ars Memoriae*, Collective Memory, and the Fortunes of Rhetoric," and for an important account of memory through an infrastructural lens, see Nathan R. Johnson's *Architects of Memory: Information and Rhetoric in a Networked Archival Age*.

³ On the matter of memory and prudence, Carruthers ("Rhetorical *Memoria*") provides an important lineage, which I will not discuss here, but I have elsewhere discussed this relationship between memory and prudence (Mehlenbacher, *On Expertise*). Johnson has also discussed the relationship between memory and values and makes an important link to contemporary accounts of public memory.

⁴ If figures are a departure from what is considered common usage (acknowledging how figuration can become forgotten over time, as has been well documented in metaphor), we might ask how to define figures. Harris and the RhetFig project (Harris and Di Marco) have based some accounting of figures on Group μ 's proposition of figurative language as a departure from an imagined degree zero baseline of language (Dubois et al.; cf. Chomsky's "ideal speaker-listener"). In other words, language is either figured or

unfigured (or, at least, close enough to whatever is agreed upon as “common” usage). Figured language could be stated in a more straightforward manner and the substitution of this plain manner of speaking for figured forms marks the departure (see, on this discussion, Fahnestock, *Rhetorical Figures* 15–17). This is not how language functions in actuality, which Harris also notes (refer to Harris, “Dementia,” also for discussion of defining figures, 21), and is rather more of a practical manner by which to study the phenomena figures indicate.

⁵ For instance, in his study *Orality and Literacy*, Ong discusses the importance of several key concepts in the study of memory, including mnemonics and recall. At the outset of this discussion, Ong’s provocation is “You know what you can recall,” and he emphasises the organizational aspect of recall as key to successfully knowing (33). Ong’s concern is the oral thinker who is only perhaps able to externalize the processes of coming to know and knowing through *aides-mémoire* such as notched sticks but not through written texts. “Think memorable thoughts,” Ong argues, is an important approach by which to preserve thoughts in a pre-literate culture, a “primary oral culture,” where one must “solve effectively the problem of retaining and retrieving carefully articulated thought” that might be achieved by “thinking in mnemonic patterns” (34). Setting aside *aides-mémoire* is something of a perplexing stance, as is Ong’s distinction between the oral and visual, as the latter features prominently in *ars memoriae* in ancient Greek and later accounts of memory, especially as *phantasmata* or the pervasive metaphors of wax tablets for the process of inscribing what we might call memories (see Carruthers, *Book of Memory* 16–17, especially; see also Johnathan Stern on the question of Ong’s preoccupations as they relate to theories of communication).

⁶ This work follows the model of Harris and Di Marco’s “chiastic suite,” which similarly distinguished between multiple figural devices deploying a reverse-repetition structure that have all been schematized as “chiasmus.” In this tradition, efforts to delineate

figural strategies are motivated by the exigence of computational rhetoric. See also work by Nancy L. Green, Jelena Mitrović et al., and Ying Yuan.

⁷ See Ignacio Brescó de Luna on collective memory.

⁸ Invention also has practical rhetorical effects in its appeals to the concept of novelty and outside of epistemic commitments to novelty, too. Of prolepsis, Gibbons tells us,

By this Figure some advantage is gained over an adversary. He is presented in his exceptions, and either confounded and silenced, or obliged to a repetition, which is not likely to be so striking and forcible as the mention of a thing fresh and untouched before. (199-200)

WORKS CITED

- Aristotle. *On Memory*. Translated by J. I. Beare. *The Complete Works of Aristotle*, edited by Jonathan Barnes, vol. 1, Princeton UP, 1984, pp. 714–720.
- . *On Rhetoric: A Theory of Civic Discourse*, edited and translated by George A. Kennedy, Oxford UP, 2007.
- . *Topics*. Translated by W. A. Pickard–Cambridge. *The Complete Works of Aristotle*, edited by Jonathan Barnes, vol. 1, Princeton UP, 1984, pp. 167–278.
- Bacon, Francis. *Advancement of Learning and Novum Organum*. P.F. Collier & Son, 1900.
- Brescó de Luna, Ignacio. “The End into the Beginning: Prolepsis and the Reconstruction of the Collective Past.” *Culture & Psychology*, vol. 23, no. 2, 2017, pp. 280–294.
- Bullinger E. W., editor. *The Companion Bible: The Authorized Version of 1611 with the Structure and Critical, Explanatory, and Suggestive Notes and with 198 Appendixes*. Publications, 1922.
- Carruthers, Mary. *The Book of Memory: A Study of Memory in Medieval Culture*. Cambridge UP, 1990.
- . “Rhetorical *Memoria* in Commentary and Practice.” *The Rhetoric of Cicero in its Medieval and Early Renaissance Commentary Tradition*, edited by Virginia Cox and John O. Ward, Brill, 2006, pp. 209–237.
- Chomsky N. *Aspects of the Theory of Syntax*. 2nd ed., MIT Press, 2014.
- Cicero. *De Inventione*. Translated by H. M. Hubbell. *De Inventione. De Optimo Genere Oratorum, Topica*, edited by E. H. Warmington, Loeb–Harvard UP, 1949.

- Dubois, Jacques, et al. *A General Rhetoric*, translated by P.B. Burrell and E.M. Slotkin, Johns Hopkins UP, 1981.
- Fahnestock, Jeanne. "Figures of Argument." *Informal Logic*, vol. 24, no. 2, 2004, pp. 115–135
- . *Rhetorical Figures in Science*. Oxford UP, 1999.
- Gibbons, Thomas. *Rhetoric: Or, a View of its Principal Tropes and Figures, in their Origin and Powers*. J. & W. Oliver, 1767.
- Green, Nancy L. "Recognizing Rhetoric in Science Policy Arguments." *Argument & Computation*, vol. 11, no. 3, 2020, pp. 257–268.
- Harris, Randy Allen. "Dementia, Rhetorical Schemes, and Cognitive Resilience." *Poroi*, vol. 15, no. 1, 2020, article 12.
- Harris, Randy Allen, and Di Marco, C. "Rhetorical Figures, Arguments, Computation." *Argument & Computation*, vol. 8, no. 3, 2017, pp. 211–231.
- Harris, Robert A. "Twelfth-century Biblical Exegetes and the Invention of Literature." *The Multiple Meaning of Scripture: The Role of Exegesis in Early-Christian and Medieval Culture*, edited by Ineke Van 't Spijker, Brill, 2009, pp. 311–329.
- Henry, Bonnie. *Soap and Water & Common Sense: The Definitive Guide to Viruses, Bacteria, Parasites, and Disease*. House of Anansi Press, 2020.
- Jack, Jordynn. "Redefining Rhetorical Figures through Cognitive Ecologies: Repetition and Description in a Canadian Wind Energy Debate." *Rhetoric Review*, vol. 41, no. 1, 2022, pp. 1–16.
- Johnson, Nathan R. *Architects of Memory: Information and Rhetoric in a Networked Archival Age*. U of Alabama P, 2020.

- Lanham, Richard A. *A Handlist of Rhetorical Terms*. U of California P, 1968.
- Lantry, L. "President Barack Obama's Eulogy for Rep. John Lewis." *ABC News*, 30 July 2020, abcnews.go.com/Politics/read-president-barack-obamas-eulogy-rep-john-lewis/story?id=72081189.
- Mehlenbacher, Ashley Rose. *On Expertise: Cultivating Character, Goodwill, and Practical Wisdom*. Penn State Press, 2022.
- . "The Proleptic Suite." *The Routledge Handbook of Language and Persuasion*, edited by Jeanne Fahnestock, Randy Allen Harris, Routledge, 2022, pp. 278–292.
- . "Rhetorical figures as argument schemes—the proleptic suite." *Argument & Computation*, vol. 8, no. 3, 2017, pp. 233–252.
- Mehlenbacher, Ashley Rose, et al. "Prolepsis and Rendering Futures in Intergovernmental Panel on Climate Change Reports." *Written Communication*, vol. 41, no.2, 2024, pp. 352–377.
- . "Proleptic Logics in Media Coverage of the IPCC Sixth Assessment Report." *Rhetoric Review*, vol. 42, no.3, 2023, pp. 154–168.
- Miller, Carolyn R. "The Aristotelian *Topos*: Hunting for Novelty." *Rereading Aristotle's Rhetoric*, edited by Alan G. Gross and Arthur E. Walzer, Southern Illinois UP, 2000, pp. 130–146.
- . "Genre as Social Action." *Quarterly Journal of Speech*, vol. 70, no. 2, 1984, pp. 151–167.
- Mitrović, Jelena, et al. "Cognitive Modeling in Computational Rhetoric: Litotes, Containment and the Unexcluded Middle." *ICAART*, vol. 2, 2020, pp. 806–813.

- Ong, Walter J. *Orality and Literacy: The Technologizing of the Word*. Routledge, 2002.
- Quintilianus, M. F. *Institutio Oratoria*. Translated by H.E. Butler, Loeb-Harvard UP, 1920. 4 vols.
- Sorabji, Richard. *Aristotle on Memory*. Brown UP, 1972.
- Sterne, Jonathan. "The Theology of Sound: A Critique of Orality." *Canadian Journal of Communication*, vol. 36, no. 2, 2011, pp. 207–225.
- Vivian, Bradford. "Memory: *Ars Memoriae*, Collective Memory, and the Fortunes of Rhetoric." *Rhetoric Society Quarterly*, vol. 48, no. 3, 2018, pp. 287–296.
- Wilson, R. Paul. *The Art of the Con*. Rowman & Littlefield, 2014.
- Yuan, Ying. "The Argumentative Litotes in The Analects." *Argument & Computation*, vol. 8, no. 3, 2017, pp. 253–266.